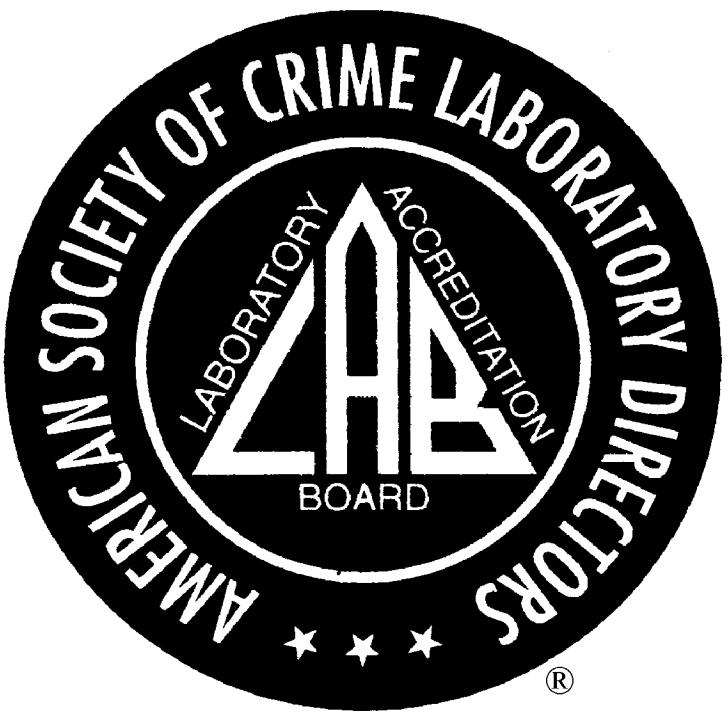
American Society of Crime Laboratory Directors



Laboratory Accreditation Board 2003 Manual

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INTRODUCTION

The Crime Laboratory Accreditation Program of the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB), is a voluntary program in which any crime laboratory may participate to demonstrate that its management, operations, personnel, procedures, equipment, physical plant, security, and health and safety procedures meet established standards. The program is managed by the Board of Directors, elected by the Delegate Assembly, to which it is responsible. The Delegate Assembly is composed of the directors of all accredited laboratories and laboratory systems. The ASCLD/LAB Bylaws (Appendix 7) govern the authority and responsibilities of the Board, the Delegate Assembly and the staff.

Accreditation is part of a laboratory's quality assurance program which should also include proficiency testing, continuing education, and other programs to help the laboratory give better overall service to the criminal justice system. Accreditation is granted for a period of five years provided that a laboratory continues to meet ASCLD/LAB standards, including completion of the Annual Accreditation Audit Report and participation in prescribed proficiency testing programs. To maintain accreditation, a laboratory must submit a new application for accreditation every fifth year, and undergo another on-site inspection using the version of the accreditation manual which is in effect at the time of the application.

In addition, laboratories may elect, or be required, to undergo interim inspections during the five-year accreditation period.

OBJECTIVES

ASCLD/LAB has adopted four objectives which define the purposes and nature of the program. They are:

- To improve the quality of laboratory services provided to the criminal justice system.
- To develop and maintain criteria which may be used by a laboratory to assess its level of performance and to strengthen its operation.
- To provide an independent, impartial, and objective system by which laboratories can benefit from a total operational review.
- To offer to the general public and to users of laboratory services a means of identifying those laboratories which have demonstrated that they meet established standards.

PROGRAM FORMAT

The program consists of statements of principles, the basic standards, criteria for evaluation of the standards, and a discussion of them.

Principle - For each major section within the three divisions of these standards, a basic statement of principle is presented. Principle is defined as: a basic rule, assumption or quality; a fixed or predetermined policy or mode of action.

Standards - The standards are statements which describe acceptable levels of performance, excellence, or attainment in that particular activity.

Criteria - The criteria are used to evaluate whether the laboratory activity meets the standard. This is often a restatement of the standard in the form of a question which can be answered "yes", "no", or "not applicable". Criteria are each assigned a number in this manual.

Discussion - The discussion sets forth the rationale used in the adoption of the standards and provides more detailed explanations of some criteria.

GRADING SYSTEM

Each criterion has been assigned a rating of either: essential (E), important (I), or desirable (D). A LABORATORY MUST ACHIEVE NOT LESS THAN 100% OF THE ESSENTIAL, 75% OF THE IMPORTANT, AND 50% OF THE DESIRABLE CRITERIA. Achievement is a "yes" for the criterion. "N/A" answers will not be considered in the grading, but each must be explained in writing. The definitions of the ratings are:

Essential - Standards which directly affect and have fundamental impact on the work product of the laboratory or the integrity of the evidence.

Important - Standards which are considered to be key indicators of the overall quality of the laboratory but may not directly affect the work product nor the integrity of the evidence.

Desirable - Standards which have the least effect on the work product or the integrity of the evidence but which nevertheless enhance the professionalism of the laboratory.

THE PROCESS

PREPARATION FOR INSPECTION

Crime laboratory directors seeking information about laboratory accreditation should direct their inquiries to the Executive Director of ASCLD/LAB. A copy of the ASCLD/LAB accreditation manual can be obtained for a fee. The process need go no further. Directors may elect to evaluate their own laboratories for the purpose of self-improvement without seeking accreditation. This is done without obligation or expense beyond the cost of the manual.

A required part of the laboratory's preparation for an inspection is the determination and documentation by the laboratory that it meets the applicable standards and criteria. The documentation is defined in this manual as a criteria file. The criteria file includes all applicable documentation of compliance with each criterion or specifically identifies the location of applicable laboratory policies and procedures. For example, the criteria file documentation for criterion 1.4.3.4 "WAS EACH EXAMINER PROFICIENCY TESTED ANNUALLY IN EACH SUBDISCIPLINE IN WHICH CASEWORK WAS PERFORMED?" might either give a listing of all personnel in the laboratory and information concerning the proficiency tests which were completed, or it might indicate that all proficiency testing records are located in the quality manager's office. A criteria file may be in hard copy form or an electronic file.

ASCLD/LAB does not engage in pre-accreditation assessments of laboratories considering accreditation. A laboratory director wishing to conduct a pre-accreditation assessment of his/her laboratory may wish to employ consultants with experience as ASCLD/LAB inspectors. The selection of the consultant(s) will be at the sole discretion of the laboratory director. If the consultant(s) chosen for this task are ASCLD/LAB inspectors, they may not serve as a member of any subsequent accreditation inspection team for the laboratory. ASCLD/LAB is not bound by recommendations made by consultant(s).

FORMAL APPLICATION

Should the director elect to proceed with accreditation, formal application is made by returning to ASCLD/LAB the Application for Accreditation (Appendix 1), along with all supporting documents listed on the application form. The application must be submitted in a ring binder with tabs marking each of the required documents or in an organized electronic format using software which is approved by the ASCLD/LAB office. When a laboratory system consisting of two (2) or more laboratories elects to apply for accreditation, an independent application must be submitted for each laboratory. Required documents which are common to all laboratories within a system may be submitted in a single binder and need not be duplicated for each laboratory within the system.

A laboratory must apply for accreditation in all disciplines in which ASCLD/LAB provides accreditation and the laboratory provides services, except crime scene. Crime scene is the only discipline for which a laboratory has an option to not apply for accreditation. In order to be eligible for accreditation in the crime scene discipline a laboratory must be performing casework in at least one additional ASCLD/LAB accredited discipline for which accreditation will be required. Operations within a laboratory that generate data input, store and/or compare information for individual characteristic databases (e.g. CODIS, NIBIN, AFIS) will be included in the inspection.

The Grade Computation Sheets/Summation of Criteria Ratings (Appendix 3), completed through self-evaluation utilizing the criteria file, must have a score exceeding the minimum requirements for accreditation. Because ASCLD/LAB recognizes that there may be specific situations in individual laboratories for which certain criteria may not be appropriate, exceptions may be considered by the Board, **but only if** a written request for exception has been made prior to the inspection.

An accredited laboratory seeking to renew its accreditation must submit the required application documents at least six months prior to the expiration of the current accreditation to avoid a lapse in accreditation. Exceptions to this requirement will be considered, upon written justification to the Board.

During the five-year accreditation period, a laboratory may elect to seek interim inspections for various reasons such as the addition of one or more disciplines since the laboratory was originally accredited, laboratory relocation, a DNA external audit requirement or for other management needs. The laboratory must submit a new application which includes all of the required application documents. A fee established by the Board will be charged for an interim inspection.

APPLICATION FEE FOR NEW APPLICANT LABORATORIES

Laboratories submitting an application for accreditation for the first time must include a non-refundable application fee at the time the application is sent to the ASCLD/LAB office. The application fee is based on the number of positions which the laboratory has for proficiency tested personnel at the time of the application. The current application fee schedule is available at www.ascld-lab.org.

REVIEW OF THE APPLICATION

Upon receipt by ASCLD/LAB, the application documents will be forwarded to an appointed inspection team captain for review to verify that all required documents are included and properly completed. If all required documents are not included and/or properly completed, proper completion will be required before the process proceeds further. When it is determined that the application documents are complete, an inspection team will be selected to conduct the inspection.

APPOINTMENT OF THE INSPECTION TEAM

Based on the information provided in the application, an inspection team captain will be appointed. The team captain will generally be an ASCLD/LAB staff inspector. In consultation with the inspection team captain, the Executive Director will determine the number of inspectors and the number of days required to conduct the inspection. The inspection team will consist of two or more inspectors, one of them being the team captain. Inspectors shall come from accredited laboratories and shall have successfully completed an ASCLD/LAB inspector training course. The inspection team will include inspectors knowledgeable in the types of work performed by the laboratory. The appointment of the inspection team is at the sole discretion of ASCLD/LAB. Input from the laboratory to be inspected will be considered. The function of the inspectors is to fairly and objectively evaluate the laboratory's compliance with all ASCLD/LAB standards and criteria which apply to the applicant laboratory. Compliance with the criteria is not negotiable by the inspection team.

The inspection team captain will coordinate with the applicant laboratory director to set an inspection date that is satisfactory to the applicant laboratory, the inspection team and to ASCLD/LAB. It is the responsibility of the applicant laboratory, upon notification, to provide copies of application documents to each member of the inspection team. The inspection team should receive all required documents at least thirty days prior to the inspection. When agreeable to the inspection team, application documents may be provided to the inspection team in electronic format rather than as hard copies.

In addition to the required application documents, the laboratory may be requested, by the inspection team captain, to provide members of the inspection team with technical procedure manuals and training programs in advance of the inspection. When requested, these manuals should be provided to the appropriate inspection team members. The opportunity to review these manuals in advance of the inspection is very important in expediting the on-site inspection process.

INSPECTION FEE

Once the size of the inspection team and the number of days required to conduct the inspection have been determined, ASCLD/LAB will invoice the applicant laboratory for an inspection fee as determined by the Board. The applicant laboratory should forward to ASCLD/LAB the inspection fee or a purchase order in the amount determined prior to the inspection. Laboratories which need to make other arrangements for payment of an inspection fee should coordinate such arrangements with the Executive Director prior to the inspection. Accreditation will not be granted to a laboratory having an unpaid inspection fee.

The inspection fee does not include the cost of any additional inspection visits. When additional visits to a laboratory are necessary to determine compliance with accreditation criteria, the cost of the subsequent visits will be the responsibility of the applicant laboratory. The applicant laboratory will be invoiced for such visits at a rate established by the Board.

CONFIDENTIALITY OF THE INSPECTION PROCESS

It is the responsibility of all participants in the accreditation process to recognize and respect the confidentiality of applicant laboratories. To ensure confidentiality, Board members, inspectors, Proficiency Review Committee members and other participants in the accreditation process are required to sign a Code of Conduct agreement prior to participating in the process. At the conclusion of the accreditation process for a laboratory, which results in either accreditation or withdrawal of an application, all inspectors and Board members having associated documents will destroy all documents. ASCLD/LAB will maintain the only records associated with the inspection of accredited laboratories, once the process has been completed.

CONFLICT OF INTEREST

In order to ensure public confidence in the impartiality and objectivity with which ASCLD/LAB carries out its mission, and to avoid any actual or perceived conflicts of interest by ASCLD/LAB Board members, Delegate Assembly members, committee members, inspectors, employees, or others acting on behalf of the Board, such individuals shall not participate in a specific action, including the process of, or vote on, the accreditation, compliance, sanctioning, or reinstatement, concerning a laboratory by which he or she is employed, or a laboratory within the same laboratory system or agency as the laboratory by which he or she is employed. The same prohibition shall apply to these individuals with respect to laboratories, laboratory systems, or agencies from which the individual is negotiating for, or has an offer of, employment, or from which the individual has retired or otherwise left employment.

ASCLD/LAB Board members, Delegate Assembly members, committee members, inspectors, employees, and others acting on behalf of the Board, shall not participate in a particular matter in which he or she, or a member of his or her household, has a financial interest, or in which a financial interest of that individual, a member of his or her household, or an employee or owner of the laboratory which employs that individual, is directly and predictably affected by that matter.

When a conflict or an appearance of a conflict becomes apparent to an individual described above, he or she shall immediately report that conflict to the ASCLD/LAB Board through the Executive Director.

CONDUCT OF THE INSPECTION

The applicant laboratory director will make reservations for the inspection team members at a convenient hotel and arrange for all transportation to and from the airport and to and from the laboratory. A laboratory system must provide all in-state transportation for the inspectors so that maximum cost savings may be realized for both ASCLD/LAB and the system. The applicant laboratory will not pay directly any of the inspection team's expenses for air travel, hotel, or meals. These expenses are included in the inspection fee.

A conference room for use by the inspection team must be provided. The laboratory staff will be advised that the inspection team will need various case records including analysts' notes and other information.

An appointment should be made by the applicant laboratory director for a private meeting between the administrator such as a sheriff or chief of police, who is in line of command over the laboratory, and the inspection team. The purpose of this meeting is to elicit the administrator's opinion of the services of the laboratory. This meeting need not be lengthy.

The applicant laboratory director should take the inspection team on a brief tour of the laboratory in order to familiarize the inspectors with the facility and to introduce them to the staff. The team captain will advise staff members that members of the team may meet with them individually. At the conclusion of the tour, the team captain will advise the applicant laboratory director that the team will conduct the rest of the inspection on its own and will arrange meetings at scheduled times during and at the conclusion of the inspection.

A number of administrative records and documents must be reviewed by the inspection team (Appendix 4). These records and documents should be available in a conference room if possible.

An important phase of the inspection is the determination that the laboratory reports are supported by adequate case records and notes as well as by appropriate examinations. This is accomplished by reviewing a sample of case files including all notes and data generated by the analyst. For this reason, a large part of the inspection will consist of examination of case files and interviews of analysts. The inspection team will

be careful not to embarrass the analysts, but will expect them to have written procedures and other documentation at hand to support the case files. The inspectors will interview any trainees to evaluate the training program. They will also interview support personnel to evaluate the support capabilities of the laboratory. During the evaluation, any criterion for which there is some question of compliance will be reported by the inspection team as a deficiency with an explanatory note. The issue will be reviewed in the summation conference.

Some parts of the process described above may be limited in scope or not performed for an interim inspection.

SUMMATION CONFERENCE

At the end of the inspection, the inspection team will meet with the laboratory director, and any others the director chooses, to review the findings including all noted deficiencies. The director may have questions about certain criteria or about the interpretation of the findings in the specific context of the laboratory.

INSPECTION REPORT AND AUDIT PROCESS

As soon as reasonably possible after conclusion of an inspection, a draft inspection report will be prepared by the inspection team and submitted to the Executive Director. The Executive Director will distribute the draft report to an audit committee consisting of a member of the Board, the Executive Director, at least three staff inspectors and the inspection team captain, if the team captain is not a staff inspector. The audit committee will promptly review the draft report, in conference, for consistency with past Board decisions and make appropriate revisions. The audited report will then be forwarded to the applicant laboratory director along with a letter explaining any changes which are made to the findings of the inspection team. The findings and observations, conclusions and recommendations contained in the audited report remain pre-decisional, pending consideration by the Board. Upon receipt of the audited report, the applicant laboratory has the option to either take appropriate steps to remediate any areas of non-compliance with accreditation standards or to appeal to the Board any disagreement with the findings in the audited report.

If there is no appeal concerning findings in the audited report, the Board will take no action until the inspection team and audit committee determine that the required percentage of criteria have been satisfied and a report is referred to the Board to consider accreditation of the laboratory. The applicant laboratory director has the right of appeal at any time during the accreditation process.

After review and acceptance by the Board, a copy of the final inspection report will be provided to the laboratory director.

POST-INSPECTION EVALUATION

The success of the inspection and accreditation program depends largely on the presentation and performance of the inspection team. A Post Inspection Evaluation form (Appendix 5) is provided for the laboratory director to evaluate the inspectors and to comment on the inspection program. While it is not mandatory, the director is urged to complete and submit the form. Constructively critical comments are important for identifying problems in the program and topics for workshops on the inspection procedures. Directors are also encouraged to submit to ASCLD/LAB written suggestions for improvements in the accreditation process.

ACCREDITATION DECISION

The decision to grant accreditation can be made only by the Board and must be made within 12 months of the date of the laboratory's first notification of an audit committee's consideration of the draft inspection report. This time is allowed to give a laboratory maximum opportunity to correct any deficiencies. A vote of the Board is required, in accordance with the Bylaws, for accreditation to be granted. The Board may limit accreditation in some disciplines to one or two subdisciplines. For example, if a laboratory conducts examinations in only one or two trace evidence subdisciplines, the certificate will indicate the accreditation limitations for that discipline in parenthesis (e.g. Trace Evidence [fire debris only]).

Laboratories applying for accreditation in the discipline of Biology, may be accredited in the subdisciplines of DNA and/or serology. The Biology subdiscipline DNA includes all types of DNA analysis. The Biology subdiscipline serology includes traditional serological analyses such as identification and phenotyping of stains. Both of the subdisciplines include screening of evidence and stain identification as a fundamental part of the discipline. A laboratory which only screens evidence and identifies stains will be accredited in Biology (stain identification only). Laboratories which apply for accreditation in the Biology subdiscipline of DNA will be inspected under the applicable standards of this manual and the applicable standards of the *FBI's Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories.* This document is available at www.ascld-lab.org.

In all deliberations concerning inspections of applicant laboratories, the Board will receive verbal and written inspection reports while in executive session. No accreditation decision will be made until the written inspection report is received and accepted by the Board. A representative of the applicant laboratory may appear before the Board to make a presentation or to answer questions of the Board without debate. The Chair (or his/her designee) will notify the director of the applicant laboratory of the Board's decision. All proceedings of the Board (except the final decision) are to be kept confidential.

When accreditation of a laboratory has been deferred due to lack of documentation, the laboratory will generally be required to provide 90 days of corrective documentation to the team captain or his/her designee before the Board will consider granting accreditation.

In the case of laboratory systems involving two or more laboratories, it is the policy of ASCLD/LAB to accredit each laboratory separately.

At any time prior to the final Board vote, a laboratory director may withdraw the application without prejudice. In such an event, the Board will make no accreditation decision. All records concerning the withdrawn application will be destroyed or be returned to the laboratory director.

DELEGATE ASSEMBLY MEMBERSHIP

Directors of laboratories which achieve accreditation also become members of the Delegate Assembly. When all laboratories within a laboratory system become accredited, the system director becomes a member of the Delegate Assembly. Delegate Assembly members are encouraged to attend and participate in the annual meeting of the Delegate Assembly. This meeting is generally held in conjunction with the annual meeting of ASCLD.

Laboratory directors or laboratory system directors may designate someone other than themselves to be the delegate for their respective laboratory or laboratory system. To designate another individual as the delegate, the laboratory or system director must send a letter to the Executive Director confirming the delegation. To appoint an individual as a temporary designee for the purpose of voting at the annual meeting of the Delegate

Assembly, the laboratory or system director must send a letter to the Executive Director making this designation. No individual attending the Delegate Assembly meeting may have more than one vote. An individual may not be the delegate or designee for more than one laboratory.

All Delegate Assembly members or their designees are placed on the mailing list for all official correspondence from ASCLD/LAB and are encouraged to vote on all issues brought before the Delegate Assembly and sent out as mail ballots. Members are also invited and encouraged to make themselves and other members of their supervisory staff available for training and participation as inspectors.

A laboratory that does not apply to renew its accreditation prior to the expiration date of its accreditation will no longer be accredited and will relinquish its membership in the Delegate Assembly.

ACCREDITATION CERTIFICATES

Once a laboratory is accredited, the laboratory will be presented a certificate of accreditation. The certificate will bear a unique certificate number and will designate the disciplines in which the laboratory is accredited. The certificate will also indicate when the accreditation was granted and the date of the expiration of accreditation. The Board will present a System Certificate of Accreditation to any laboratory system in which all of its laboratories have been accredited.

Upon renewal of accreditation, a laboratory's certificate shall show a month and day of accreditation that shall be five years from the month and day on the certificate of the previous accreditation, except when an accreditation expires prior to the submission of a new application for accreditation.

Although presented to a laboratory, each accreditation certificate remains the property of ASCLD/LAB. Failure to remain compliant with accreditation standards could result in the revocation of accreditation and the return of the certificate to ASCLD/LAB.

ACCREDITATION CEREMONY

Once a laboratory has been granted accreditation, it is appropriate that this achievement be publicly recognized. Laboratories are encouraged to celebrate their achievement with a ceremony at which the Board Chair or designee will formally present the accreditation certificate. The accreditation ceremony and attendant media coverage serve the dual purposes of demonstrating the capabilities of the laboratory to its users and of publicizing the accreditation program. The invoice for the inspection fee will include an optional fee for an accreditation ceremony to be attended by a member of the Board. If an applicant laboratory opts to not include this fee, they will be invoiced separately if they later elect to request a member of the Board to participate in a ceremony. Ceremony fees for laboratories outside of the U.S. or Canada will be invoiced separately from the inspection fee and will include only the actual transportation, lodging and meals.

ASCLD/LAB LOGO

The American Society of Crime Laboratory Directors/Laboratory Accreditation Board's name, acronym (ASCLD/LAB), and logo are registered trademarks, reserved for the official use of ASCLD/LAB. The name, acronym, and logo may not be used, reproduced, or displayed for any purpose by any individual or organization, including accredited laboratories and members of the Delegate Assembly, without the express written permission of the Executive Director.

Designation of a laboratory or laboratory system as an ASCLD/LAB accredited laboratory on letterhead, stationary, laboratory reports, business cards, advertisements, signs, or any other object or image, generally will be required to be in the following format:

AN ASCLD/LAB ACCREDITED LABORATORY *(SINCE DATE OF ACCREDITATION)*

Laboratories must be careful not to use the ASCLD/LAB name, acronym, or logo on any document reporting findings in functional areas for which the laboratory is not accredited, or in any other manner that will lead others to reasonably believe that the laboratory has been accredited in functional areas for which it has not been accredited. The ASCLD/LAB Board of Directors considers misrepresentations as to accreditation to be a serious violation of ethics and the Board's policy.

ANNUAL ACCREDITATION FEE

An annual accreditation fee will be accessed to each laboratory accredited by ASCLD/LAB, including any periods of probation or suspension. The annual accreditation fee funds all administrative expenses of the Board, including but not limited to costs for maintaining a full-time Executive Director, essential staff and an office to conduct the affairs of ASCLD/LAB.

The annual accreditation fee will be based upon ASCLD/LAB's approved Annual Administrative Budget. The invoice for the accreditation fee is due and payable by the laboratory within three months of the date of invoice. A late fee of $100.00 will be imposed upon every laboratory which fails to timely pay the current year's annual accreditation fee. Any payment toward accreditation fees will be applied first to delinquent accreditation fees, second to late fees, and finally to the current year's accreditation fees. No application for renewal of accreditation will be accepted by ASCLD/LAB until all accreditation fee arrearage, including late fees, has been paid in full.

COMPLIANCE MONITORING

To retain accredited status for a full five year term, a laboratory is expected to continue to meet the standards under which it was accredited. The principal means by which ASCLD/LAB monitors compliance are the Annual Accreditation Audit Report filed by the laboratory director, proficiency testing reports submitted by approved test providers and interim inspections. Any information suggesting non-compliance with the standards by an accredited laboratory will be addressed by the Board on a case-by-case basis. Upon receipt of such information, the Board will consider the information and determine if an investigation or an interim inspection should be required. The laboratory director shall be notified of any sanctions under consideration and has the right to make representations in person at any subsequent meeting in which compliance issues concerning that laboratory are considered. The Board will decide what, if any, sanction will be imposed.

ANNUAL ACCREDITATION AUDIT REPORT

By the first of April of each year, directors of accredited laboratories are required to submit to the Executive Director an Annual Accreditation Audit Report (Appendix 6) based on a self-evaluation of the laboratory's status with respect to all criteria during the previous calendar year. Whenever a laboratory finds that an essential criterion should be scored "NO" on the report, a statement must be attached to the report which explains the reason for the score and steps taken to bring the laboratory into compliance with the standard. Separate statements are required for any significant changes made in the laboratory during the previous year

or for significant changes that have not been reported since the laboratory was accredited. Changes which must be reported are listed on the report form (Appendix 6).

Laboratories which have been accredited to an earlier version of the manual will not be required to be in compliance with new versions. However, laboratories are required to conduct their annual audit using the standards and criteria from the version of the accreditation manual which is in effect at the time of the audit and report in the Annual Accreditation Audit Report steps that are being taken to come into compliance with the current version of the manual.

PROFICIENCY TESTING

The Board has adopted a comprehensive Proficiency Review Program (PRP) and established a Proficiency Review Committee (PRC) for each of the accredited disciplines. These committees are responsible for reviewing the external proficiency test reports received from approved test providers for each of the accredited laboratories. The PRCs work under the direction of the Board through the ASCLD/LAB Quality Manager and serve as the initial contact with laboratories in evaluating apparent proficiency testing inconsistencies. The Proficiency Review Program is provided with this manual as Attachment 1.

INTERIM INSPECTIONS

When information comes to the Board which indicates that an accredited laboratory has failed to remain compliant with the standards under which the laboratory was accredited, an interim inspection may be initiated by Board action. The scope of the inspection will be determined by the Board, based on the nature of the concerns brought to the Board's attention. A laboratory may be required to provide relevant documentation to the assigned inspection team prior to their visit to the laboratory. The findings of the inspection team will be reported to the Board and the laboratory director and/or parent organization.

SANCTIONS

Accreditation by ASCLD/LAB is recognized by the criminal justice system as a means of determining that a laboratory has met a set of internationally recognized standards of operation for forensic laboratories. Once accreditation has been granted to a laboratory, it is expected that the laboratory will consistently remain in compliance with the standards under which it was accredited. It is recognized that unforeseen circumstances may cause a laboratory to experience temporary non-compliance with some of the standards. When it is recognized that the laboratory is experiencing or has experienced a period of non-compliance, actions must be taken by the laboratory to bring it back into compliance and to correct any potential miscarriages of justice. Failure to take timely, appropriate and required corrective actions regarding non-compliance may result in any of the following sanctions:

Probation for a specified time during which the laboratory must comply with specified requirements and/or conditions.

Suspension for a specified time during which the laboratory has demonstrated that the problem has been remedied.

Revocation for a specified time after which the laboratory may submit a new application for accreditation.

APPEALS

If the accreditation status of a laboratory is classified by the Board as probationary, suspended, or revoked, the laboratory director may appeal to the Delegate Assembly. Written reasons for appeal must be filed with the Executive Director within thirty days of the Board decision. The Executive Director will provide a copy of the appeal to each member of the delegate assembly at least thirty days prior to its next annual meeting. The laboratory director has the right to appear in person at this meeting to make representations. The Delegate Assembly, at its annual meeting, will make a decision by a majority vote of those in attendance and this decision will be final.

When timing is such that appeal to the Delegate Assembly at its annual meeting will cause an undue hardship due to the delay, the appealing laboratory director may prepare a written appeal and request that the appeal be presented to the Delegate Assembly. The Board shall then prepare a written response and distribute both documents to the Delegate Assembly through the mail for a determination by majority vote of the responding delegates.

REMOVAL OF SANCTIONS

Probation and suspension sanctions will be removed when the laboratory can demonstrate to the satisfaction of the Board of Directors that the deficiencies which resulted in probation or suspension have been corrected. This may require an interim inspection, a successful completion of the next regularly scheduled proficiency test or other measures which the Board may deem appropriate. A laboratory which has had accreditation revoked must submit a new application for accreditation and submit to the accreditation process.

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1. LABORATORY MANAGEMENT AND OPERATIONS

1.1 PLANNING - The analysis of relevant information from the present and past, and the assessment of probable future developments so that a course of action (plan) may be determined that enables the organization to meet its stated objectives.

1.1.1 OBJECTIVES

PRINCIPLE

Management will be more effective when, before initiating any course of action, the objectives are clearly determined, articulated, and understood.

STANDARD AND CRITERIA

The laboratory should establish objectives which are relevant to the community that it serves and communicate them to all employees orally and in written form.

1.1.1.1	DOES THE LABORATORY HAVE A WRITTEN STATEMENT OF ITS OBJECTIVES?	**(I)** **Y N N/A**
1.1.1.2	DO THE OBJECTIVES APPEAR TO BE RELEVANT TO THE NEEDS OF THE COMMUNITY SERVICED BY THE LABORATORY?	**(I)** **Y N N/A**
1.1.1.3	DOES THE LABORATORY STAFF UNDERSTAND AND SUPPORT THE OBJECTIVES?	**(D)** **Y N N/A**

DISCUSSION

A written statement of objectives (1.1.1.1) fulfills a need for direction through a careful analysis of what the director and the parent organization believe are the appropriate functions of the laboratory and the direction in which it should be moving. Objectives make a significant contribution to the management process and serve as a basis for a sound management philosophy.

Objectives will vary from laboratory to laboratory depending on such things as the size, range of services provided, nature of the parent organization, whether the laboratory stands alone or is part of a system, the size of the population served, and the nature of the area served (e.g., dense urban, dispersed rural). The objectives must be relevant to the needs of the community serviced (1.1.1.2). Regardless of the wording of the objectives, they have no value unless clearly understood and supported by the staff (1.1.1.3).

1.1.2 ADMINISTRATIVE PRACTICES

PRINCIPLE

Employee performance of administrative functions will improve when the administrative practices have been logically developed, clearly stated, and fully communicated to them.

STANDARDS AND CRITERIA

A laboratory or its parent agency should have a formal written budget which is consistent with the forensic services provided by it.

1.1.2.1	DOES THE LABORATORY OR ITS PARENT AGENCY HAVE A FORMAL WRITTEN BUDGET?	**(I)** **Y N N/A**
1.1.2.2	IS THE BUDGET ADEQUATE TO MEET THE WRITTEN OBJECTIVES?	**(I)** **Y N N/A**

DISCUSSION

The budget for the laboratory (1.1.2.1) should permit it to meet its objectives. This may be accomplished through a laboratory, laboratory system or parent agency budget. For example, if the objectives describe a full service laboratory providing timely results but there is insufficient funding for staff or essential equipment in one or more of the service areas, or if inadequate staffing has resulted in large backlogs and lengthy turnaround times, the budget cannot be considered adequate to meet the objectives (1.1.2.2).

Clearly written and well understood procedures must exist for handling and preserving the integrity of evidence; laboratory security; preparation, storage, security and disposition of case records and reports; and for maintenance and calibration of equipment and instruments. Clearly written and well understood procedures should also exist for control of materials and supplies; inventory of equipment and instruments; duty hours; leave time; job requirements and descriptions; personnel evaluations and objectives; and for employee grievances.

DO CLEARLY WRITTEN AND WELL UNDERSTOOD PROCEDURES EXIST FOR THE FOLLOWING:

1.1.2.3	HANDLING AND PRESERVING THE INTEGRITY OF EVIDENCE.	**(E)** **Y N N/A**
1.1.2.4	LABORATORY SECURITY.	**(E)** **Y N N/A**
1.1.2.5	PREPARATION, STORAGE, SECURITY AND DISPOSITION OF CASE RECORDS OR REPORTS.	**(E)** **Y N N/A**
1.1.2.6	CONTROL OF MATERIALS AND SUPPLIES.	**(D)** **Y N N/A**
1.1.2.7	CALIBRATION OF EQUIPMENT AND INSTRUMENTS.	**(E)** **Y N N/A**
1.1.2.8	INVENTORY OF EQUIPMENT AND INSTRUMENTS.	**(D)** **Y N N/A**
1.1.2.9	DUTY HOURS.	**(I)** **Y N N/A**

1.1.2.10	LEAVE TIME.	**(I)** **Y N N/A**
1.1.2.11	JOB REQUIREMENTS AND DESCRIPTIONS.	**(D)** **Y N N/A**
1.1.2.12	PERSONNEL EVALUATIONS AND OBJECTIVES.	**(D)** **Y N N/A**
1.1.2.13	EMPLOYEE GRIEVANCES.	**(D)** **Y N N/A**

DISCUSSION

An organization must define and provide administrative guidance to its staff in their daily activities. Many, if not most, of the criteria 1.1.2.5 to 1.1.2.13 will be met by procedures provided to the laboratory by its parent organization. An important aspect of this standard is the requirement that the procedures be "well understood" by all staff. The inspection team will need to confirm that the stated procedures are in fact being followed.

A laboratory should have a management information system which provides information which assists the laboratory in accomplishing its objectives.

1.1.2.14	DOES THE LABORATORY HAVE AND USE A MANAGEMENT INFORMATION SYSTEM?	**(I)** **Y N N/A**

DISCUSSION

Supervisors need good information upon which to base decisions. Some of this information is most easily developed by and derived from a management information system (1.1.2.14). A management information system is a system for the collection, manipulation, storage, and retrieval of information (e.g., productivity, budget tracking) to assist laboratory management to determine how efficiently and effectively the laboratory is operating, and to develop resource requirements to meet the laboratory's short and long term goals and objectives. A management information system should provide the laboratory management with meaningful statistical data such as caseload distribution, case turn-around time and information which is helpful in budgetary planning and allocation of personnel and resources. Evidence tracking may be a part of a laboratory's management information system, but it is not a required component.

1.2 ORGANIZING - The process of specifying or identifying work, grouping work and resources into a structure, assigning work, and establishing a chain of command between individuals and groups.

1.2.1 ORGANIZATIONAL STRUCTURE

PRINCIPLE

The organization will be more effective and efficient when interacting variables such as numbers of personnel, degree of interaction of personnel required, level of decision making, and congruence of goals of members and the organization have been fully considered when grouping work and resources.

STANDARD AND CRITERIA

The laboratory manager should be able to relate the organizational structure to interacting variables such as those stated in the principle.

1.2.1.1	DOES THE ORGANIZATIONAL STRUCTURE GROUP THE WORK AND PERSONNEL IN A MANNER THAT ALLOWS FOR EFFICIENCY OF OPERATION, TAKING INTO ACCOUNT THE INTERRELATION OF VARIOUS FORENSIC DISCIPLINES?	**(D)** **Y N N/A**
1.2.1.2	HAS THE LABORATORY DIRECTOR CONSIDERED AND TAKEN APPROPRIATE ACTION TO CORRECT ANY DISCREPANCIES WITH REGARD TO NUMBERS OF PERSONNEL WHEN GROUPING WORK AND RESOURCES?	**(D)** **Y N N/A**

DISCUSSION

There is no single perfect organization for a forensic laboratory. If the organization reflects forethought and consideration of the variables listed in the principle, the organization will probably be effective (1.2.1.1 and 1.2.1.2).

1.2.2 DELEGATION OF AUTHORITY

PRINCIPLE

If the laboratory is to achieve its objectives, the director must possess sufficient authority to make and enforce decisions. Effective organization requires delegation of authority commensurate with assigned responsibilities, assurance of accountability, unity of command, and established performance criteria.

STANDARDS AND CRITERIA

The laboratory director should have authority commensurate with the assigned responsibilities.

1.2.2.1	IS THE LABORATORY DIRECTOR'S AUTHORITY WELL DEFINED?	**(I)** **Y N N/A**
1.2.2.2	DOES THE LABORATORY DIRECTOR HAVE AUTHORITY COMMENSURATE WITH RESPONSIBILITIES?	**(I)** **Y N N/A**

DISCUSSION

In every organization, someone must be assigned responsibility for the efficient and effective performance of specific functions. It is important that the persons assigned such responsibilities also be delegated appropriate, well-defined, authority to act or direct the actions of others (1.2.2.1). This authority must be commensurate with the responsibilities (1.2.2.2). Effective organization is precluded unless the director has the authority to accomplish the mission of the laboratory.

Delegation of authority within the laboratory should follow the organizational process outlined in the principle.

1.2.2.3	IS THERE SUFFICIENT DELEGATION OF AUTHORITY?	**(I)** **Y N N/A**
1.2.2.4	IS AUTHORITY OF SUPERVISORS COMMENSURATE WITH THEIR RESPONSIBILITIES?	**(I)** **Y N N/A**
1.2.2.5	IS EACH SUBORDINATE ACCOUNTABLE TO ONE AND ONLY ONE IMMEDIATE SUPERVISOR PER FUNCTION?	**(I)** **Y N N/A**
1.2.2.6	ARE PERFORMANCE EXPECTATIONS ESTABLISHED AND ARE THEY UNDERSTOOD BY LABORATORY PERSONNEL?	**(I)** **Y N N/A**

DISCUSSION

As managerial responsibilities increase in scope and complexity, delegation of authority down through the organization becomes necessary (1.2.2.3 and 1.2.2.4). A laboratory should have a structure that ensures maximum use of the knowledge and capabilities of its staff. Authority delegated to the lowest possible level serves to achieve this goal (1.2.2.5). It is important, however, that all staff clearly understand what is expected of them (1.2.2.6).

1.3 DIRECTING - The process of motivating, leading, and guiding.

1.3.1 SUPERVISION

PRINCIPLE

Good supervision encourages creative thought, maintains objectivity, and critically evaluates programs.

STANDARDS AND CRITERIA

Constructive discussion should occur between supervisors and subordinates.

1.3.1.1	IS THERE CONSTRUCTIVE DISCUSSION BETWEEN SUPERVISORS AND SUBORDINATES?	**(D)** **Y N N/A**

Supervisors should carefully and objectively review laboratory activities and personnel.

1.3.1.2	DO SUPERVISORS CAREFULLY AND OBJECTIVELY REVIEW LABORATORY ACTIVITIES AND PERSONNEL?	**(I)** **Y N N/A**

Supervisory techniques should encourage creative thinking and objectivity and should recognize meritorious performance of subordinates.

1.3.1.3	DO THE SUPERVISORY TECHNIQUES ENCOURAGE CREATIVE, OBJECTIVE THINKING AND RECOGNIZE MERITORIOUS PERFORMANCE?	**(D)** **Y N N/A**

DISCUSSION

The foundation of an organization's performance lies in the ability and desire of the staff to perform. If ideas are suppressed, an organization becomes stagnant. When objectivity is less than adequate, systems become imbalanced and individuals become dissatisfied. Without careful review of staff and activities, the quality of the laboratory's services could be diminished. Exceptional performance must be recognized in order to be nurtured. Poor performance should also be recognized and a positive approach used to gain the individual's cooperation in resolving the problem; however, should cooperation not be forthcoming, it is the supervisor's responsibility to take appropriate action (1.3.1.1 to 1.3.1.3).

1.3.2 COMMUNICATION

PRINCIPLE

All communication, to be effective, should be clear, concise, and simply stated.

STANDARDS AND CRITERIA

Channels of communication within the laboratory should exist for coordination of case work and to ensure wide dissemination of technical information. Vertical, horizontal and diagonal channels of communication should exist within and external to the laboratory.

1.3.2.1	DO CLEAR VERTICAL, HORIZONTAL AND DIAGONAL CHANNELS OF COMMUNICATION EXIST WITHIN AND EXTERNAL TO THE LABORATORY?	**(D)** **Y N N/A**

Vertical channels of communication should normally be used for administrative functions.

1.3.2.2	ARE VERTICAL CHANNELS OF COMMUNICATION USED FOR ADMINISTRATIVE FUNCTIONS?	**(D)** **Y N N/A**

Staff meetings should be conducted on a regular basis.

1.3.2.3	ARE STAFF MEETINGS HELD ON A REGULAR BASIS?	**(D)** **Y N N/A**

DISCUSSION

Good communication is necessary for effective operation (1.3.2.1 and 1.3.2.2). All lines of communication – vertical, horizontal and diagonal – should be present and open. Regularly held staff meetings are a very good tool for maintaining open communications with laboratory personnel (1.3.2.3).

1.3.3 TRAINING AND DEVELOPMENT

PRINCIPLE

Training and development of employees must be emphasized to improve accuracy, increase productivity, and enable them to assume greater responsibility.

STANDARDS AND CRITERIA

A training program to develop the technical skills of employees is essential in each applicable functional area.

1.3.3.1	DOES THE LABORATORY HAVE AND USE A DOCUMENTED TRAINING PROGRAM IN EACH FUNCTIONAL AREA FOR EMPLOYEES WHO ARE NEW, UNTRAINED OR IN NEED OF REMEDIAL TRAINING?	**(E)** **Y N N/A**

A formalized personnel development program is important to prepare employees to assume more responsible jobs.

1.3.3.2	DOES THE LABORATORY HAVE AN EMPLOYEE DEVELOPMENT PROGRAM?	**(I)** **Y N N/A**

The laboratory should maintain an adequate forensic library to include literature published in the applicable functional areas.

1.3.3.3	DOES THE FORENSIC LIBRARY CONTAIN CURRENT BOOKS, JOURNALS, AND OTHER LITERATURE DEALING WITH EACH FUNCTIONAL AREA?	**(I)** **Y N N/A**

A system or procedure should exist to encourage a review of appropriate new literature by personnel.

1.3.3.4	DOES A SYSTEM EXIST TO ENCOURAGE EACH EXAMINER TO REVIEW APPROPRIATE NEW LITERATURE?	**(I)** **Y N N/A**

DISCUSSION

A laboratory or laboratory system's training program must emphasize and teach the skills and knowledge required to achieve the minimum standards of competence and good laboratory practice within a specific area of work. A laboratory's training program may be an outline with references to more detailed training modules which may be in other laboratory documents. The training program must be sufficiently comprehensive to cover all aspects of the work performed by a laboratory for each discipline in which the laboratory performs casework. Training programs for the various disciplines may be maintained separately. Training must also include a substantial knowledge of forensic science across its wide spectrum and of criminal and civil law and procedures. A demonstration of competence to perform what is expected must be included in the program. It is recommended that the laboratory establish a formal means of recognition of successful completion of the training such as a certificate, letter, or memorandum (1.3.3.1).

The laboratory should foster an atmosphere wherein employees are encouraged to improve their knowledge and skills, to grow as individuals, and to fully develop their potential. The primary means for accomplishing this is a dynamic employee development program (1.3.3.2).

A development program should document the laboratory's policy on employee development. It should address the various opportunities available to employees, such as:

- professional organizations and their meetings

- staff development seminars
- technical training courses
- in-house technical meetings, courses, and seminars
- laboratory sponsored seminars and conferences
- college level courses

The development program should state how employees can participate in it and should identify the procedures to be followed when applying for such training. If the laboratory has any special criteria for selection of personnel for the program, they should be stated. It is important that such a program demonstrate planning for the development of individual employees, laboratory sections and the laboratory as a whole.

In the absence of a written program, a well-documented record of provision of time and funding to employees for training will serve to verify that the laboratory has an employee development program (1.3.3.2).

The laboratory should also maintain an up-to-date library and have a system in place that ensures that employees are afforded the opportunity to review appropriate new literature. A laboratory's library may be dispersed throughout the laboratory and may consist of text and electronic media (1.3.3.3 and 1.3.3.4).

1.4 CONTROLLING - Establishing standards of performance, measuring current performance, and making continuous improvements as required.

1.4.1 EVIDENCE CONTROL

PRINCIPLE

The control system is effectively designed when it ensures and documents the integrity of evidence.

STANDARDS AND CRITERIA

A chain of custody record (e.g., signature, date, description of evidence) must be maintained which provides a comprehensive, documented history of each evidence transfer over which the laboratory has control.

1.4.1.1	DOES THE LABORATORY HAVE A WRITTEN OR SECURE ELECTRONIC CHAIN OF CUSTODY RECORD WITH ALL NECESSARY DATA WHICH PROVIDES FOR COMPLETE TRACKING OF ALL EVIDENCE?	**(E)** **Y N N/A**

DISCUSSION

A forensic laboratory must have a system that ensures the integrity of all evidence under its control. Key components of an evidence control system are a documented chain of custody, proper marking of evidence, proper evidence seals, and a secure area for evidence storage. Transfers of evidence between individuals must be acknowledged by both parties at the time of the transfer. Transfers of evidence to or from an evidence storage location must be acknowledged by the individual making the transfer, at the time of the transfer. Electronic tracking of evidence is an acceptable alternative to a written record as long as the

computerized data is sufficiently secure, detailed and accessible for review and can be converted to a hard copy when necessary. Unique personal identifiers, having individual security are acceptable in lieu of actual signatures (1.4.1.1).

Each individual item of evidence must be marked for identification, when practical. If the item does not lend itself to marking, its proximal container or identifying tag must be marked.

1.4.1.2 IS ALL EVIDENCE MARKED FOR IDENTIFICATION? **(E)**
Y N N/A

DISCUSSION

As a minimum, evidence or its container must be marked with an unique identifier such as a laboratory case number. The purpose of marking evidence for identification is to ensure that evidence is not mistaken with other evidence. For some evidence, the unique identifier must include an item designator, or other means, to distinguish items within a case. Actual items of evidence must be marked when practical. It is recognized that with some evidence (e.g., paint chips, questioned documents exemplars or antique collectable items) it is not practical and/or not appropriate to mark the evidence because marking may alter its evidentiary or intrinsic value. Evidence which is not marked, for such reasons, must be identified by other means such as tagging the evidence with a permanent tag or by placing the evidence in a suitable container that is appropriately sealed. When a container is used solely to identify an item of evidence, the initials of the person making the seal on that container are not required if that container is within another properly sealed container.

Evidence seals must be designed and used to protect the integrity of the evidence.

1.4.1.3 IS EVIDENCE STORED UNDER PROPER SEAL? **(E)**
Y N N/A

DISCUSSION

When it is necessary to place evidence in a container to protect it from loss, cross-transfer and/or contamination, the container must be properly sealed. Proper seals may be accomplished in various ways such as heat seal, tape seal and lock seal. All seals must be initialed or otherwise marked to document the person sealing the evidence. Heat sealed packages must have initials or other identification across the heat seal to be properly sealed (1.4.1.3).

A container is "properly sealed" only if its contents cannot readily escape and only if entering the container results in obvious damage/alteration to the container or its seal. The actual seal itself must be sufficient to prevent the possibility of the item(s) contained from being lost or removed without altering the seal or from being contaminated by outside sources so as to alter the integrity of the evidence.

Packaged evidence received by a laboratory which does not bear the initials or identification of the person sealing the evidence container is not considered to be properly sealed. The laboratory therefore must have a procedure whereby it establishes a proper seal on the container. Examples of ways to accomplish this include: (1) placing a piece of evidence tape perpendicularly across the seal with the initials of the person receiving the evidence or (2) resealing the complete package in a heat sealed envelope or other container with proper initials. Laboratories receive evidence from numerous sources, making it very difficult to ensure that all evidence submitted is properly sealed. However, the laboratory must ensure that evidence stored in the laboratory is properly sealed.

Evidence which is properly sealed and marked for identification may be placed in unsealed and unmarked containers such as boxes or bags for the purpose of grouping items of evidence or for the convenience of carrying the evidence without that container having to meet the requirements of identification and sealing, as long as evidence security requirements are otherwise met.

Procedural precautions must exist which reduce the risk of evidence loss, cross transfer, contamination and /or other deleterious change.

1.4.1.4	IS EVIDENCE PROTECTED FROM LOSS, CROSS TRANSFER, CONTAMINATION AND /OR DELETERIOUS CHANGE?	**(E)** **Y N N/A**

DISCUSSION

There are many factors involved in the protection of evidence from loss, cross transfer, contamination and/or deleterious change. These factors include the proper identification, packaging, sealing and storage of evidence. A laboratory must take all of these factors into consideration in the processing of evidence. Biological evidence, of both plant and animal origin, is generally most subject to experiencing deleterious change.

Because heat and moisture speed the degradation of biological evidence, such evidence should be air dried and stored in a cool environment as soon as possible. Airtight containers, such as plastic bags, do not provide for drying of moist biological evidence and should not be used to store such evidence at ambient temperature or refrigerated.

When evidence, such as latent prints and impressions can only be recorded or collected by photography and the image itself is not recoverable, the photograph or negative of the image must be treated as evidence.

Evidence collected from a crime scene must be protected from loss, cross transfer, contamination and/or deleterious change, whether in a sealed or unsealed container, during transportation to an evidence facility. Where appropriate, further processing to preserve , evaluate, document, or render evidence safe shall be accomplished prior to final packaging. Evidence collected from a crime scene must be appropriately identified, packaged and entered into the evidence control system as soon as practical (1.4.1.2, 1.4.1.3 and 1.4.1.4).

Computer systems used for examining digital evidence may be vulnerable to unauthorized access if connected to a network and appropriate measures must be implemented to safeguard the systems. In addition, viruses may be spread by exchange of media or e-mail from one computer to another. Untested media and e-mail on computer systems used for examining digital evidence should be scanned with an anti-virus utility having current definitions.

A secure area for overnight and/or long-term storage of evidence must be available.

1.4.1.5	IS THERE A SECURE AREA FOR OVERNIGHT AND/OR LONG-TERM STORAGE OF EVIDENCE?	**(E)** **Y N N/A**

DISCUSSION

To maintain the integrity of evidence, facilities must be provided to secure it in accordance with the laboratory's policies. A laboratory should provide an area for long-term storage of evidence. It should also provide a smaller area, preferably in the examiner's work area, for each examiner to maintain temporary

storage of evidence. Proper security can be achieved by storing the evidence in locked cabinets, refrigerators, vaults, or rooms. Evidence storage space may be shared by laboratory personnel. It is not necessary to place locks on refrigerators and freezers which are maintained in rooms and/or areas which are secure and restricted. Access to each of these areas must be restricted to personnel authorized by the director.

Evidence such as fingerprints and/ or projectiles in unsolved cases, that are subject to frequent requests for comparison may be treated as "evidence in the process of examination." Laboratories may establish justifiable operational policy concerning when latent print evidence, firearms evidence or similar evidence is considered to be in the process of examination. Evidence which meets the laboratory's policy requirements for "evidence in the process of examination" may be stored unsealed in a secure, limited access area, as long as the evidence is protected from loss, cross-transfer, contamination and/or deleterious change. Laboratory policy concerning "evidence in the process of examination" cannot be open-ended and must be based upon a justifiable expectation of frequent examination.

During the process of examining evidence, if an examiner needs to leave for a short time, such as for lunch, it is not necessary to pack up the evidence being examined if it is in a secure area (e.g., a limited-access laboratory room). This is also true for large and/or cumbersome items, or evidence requiring extended processing time, where it is advantageous to have the evidence remain out and there is limited access to the area. "Limited access" is access limited to personnel authorized by the director (1.4.1.4 and 1.4.1.5).

1.4.2 QUALITY SYSTEM

PRINCIPLE

To enhance the validity of results and conclusions reported, a laboratory must establish and maintain a quality system that is appropriate for the range of forensic disciplines as well as the types and numbers of examinations that are conducted. Broadly accepted procedures, equipment and materials must be used and supported by proper case records.

STANDARDS AND CRITERIA

All elements of a laboratory's quality system must be clearly documented in a quality manual which is kept current under the responsibility of a quality manager.

1.4.2.1	DOES THE LABORATORY HAVE A COMPREHENSIVE QUALITY MANUAL?	**(E)** **Y N N/A**

DISCUSSION

The success of the quality system depends on the commitment of management and the active participation of each member of the laboratory staff. To ensure that everyone fully understands what the expectations are, all elements of the quality system must be clearly articulated in a quality manual (1.4.2.1).

A comprehensive Quality Manual must contain or reference the documents or policies/procedures pertaining to the following:

- A quality policy statement including objectives and commitments by management
- The organization and management structure of the laboratory, its place in any parent organization, and relevant organizational charts

- The relationships and responsibilities of management, technical operations, and support services in implementing the quality system
- Job descriptions, education, and up-to-date training records of laboratory staff
- Control and maintenance of documentation of case records and procedure manuals
- The laboratory's procedures for ensuring that measurements are traceable to appropriate standards, where available
- The type and extent of examinations conducted by the laboratory
- Validation of test procedures used
- Handling evidence
- The use of standards and controls in laboratory procedures
- Calibration and maintenance of equipment
- Practices for ensuring continued competence of examiners including interlaboratory comparisons, proficiency testing programs, and internal quality control schemes (e.g., technical review)
- Taking corrective action whenever analytical discrepancies are detected
- Monitoring court testimony to ensure the reporting of scientific findings in an unbiased and effective manner
- Laboratory protocol permitting departures from documented policies and procedures
- Dealing with complaints
- Disclosure of information
- Audits and quality system review

A laboratory must have an individual designated as the Quality Manager.

1.4.2.2	IS AN INDIVIDUAL DESIGNATED AS THE QUALITY MANAGER?	**(E)** **Y N N/A**

DISCUSSION

The quality manager, whether assigned full-time or part-time, is responsible for the quality system. It is essential that this individual be objective and be capable of coordinating all of the activities required to implement and maintain quality. The quality manager needs to have direct access to the highest levels of management at which decisions are made regarding laboratory policy and resources. Ideally, the quality manager should have training in quality assurance concepts and techniques and also should have

organizational autonomy from the technical operation. The scope of responsibilities and authority must be clearly articulated.

Responsibilities of a quality manager should include the following:

- Maintain and update the quality manual
- Monitor laboratory practices to verify continuing compliance with policies and procedures
- Evaluate instrument calibration and maintenance records
- Periodically assess the adequacy of report review activities
- Ensure the validation of new technical procedures
- Investigate technical problems, propose remedial actions, and verify their implementation
- Administer proficiency testing and evaluate results
- Select, train, and evaluate internal auditors
- Schedule and coordinate quality system audits
- Maintain training records of laboratory personnel
- Recommend training to improve the quality of laboratory staff
- Propose corrections and improvement in the quality system (1.4.2.2).

To verify that its operations continue to comply with the requirements of its quality system and the standards under which ASCLD/LAB accreditation was granted, each laboratory must conduct an annual audit of its operations and submit an Annual Accreditation Audit Report (Appendix 6) to ASCLD/LAB, by April 1, each year.

1.4.2.3	DID THE LABORATORY CONDUCT AND DOCUMENT AN ANNUAL AUDIT OF ITS OPERATIONS AND SUBMIT AN ANNUAL ACCREDITATION AUDIT REPORT TO ASCLD/LAB BY THE REQUIRED DEADLINE	**(E)** **Y N N/A**

DISCUSSION

Audits (1.4.2.3) are one of the primary tools used to evaluate, confirm or verify activities related to quality. Its purpose is to assess compliance with the operational requirements of the quality system. Periodic audits, along with day-to-day review of scientific reports, provide an effective means for ensuring that quality control activities are being implemented and that each forensic examiner performs in a manner consistent with the quality system. For compliance with this criterion, the laboratory must be conducting annual audits in all accredited disciplines and all other aspects of laboratory management and operations. With the exception of the requirement for an external DNA audit, (see *Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories*) these audits may be internal, external or any combination thereof.

Each laboratory which is accredited as of January 1, must submit an Annual Accreditation Audit Report (Appendix 6) for the previous calendar year to ASCLD/LAB by April 1 of that year. Neither a recent inspection report nor an application for renewal of accreditation will replace the Annual Accreditation Audit Report, but either may serve as the basis for the annual report.

Each laboratory must conduct the annual audit using the standards and criteria of the manual which is in effect at the time of the audit, regardless of the manual version under which the laboratory was accredited. Laboratories which were accredited under the standards and criteria of an earlier version of the manual are not required to be in compliance with standards which were added or raised to Essential after the laboratory's accreditation. However, the laboratory must include statements with the report concerning each Essential standard which they do not meet, indicating the steps that are being taken to bring the laboratory into compliance with the new or revised standards and criteria. The report must include explanations for all Essential criteria scored "No" during the self-evaluation.

An audit program is more likely to succeed if the auditors are selected and trained by the quality manager. Auditors, generally selected from among the employees, should be tactful, thorough, objective, and self-confident as well as technically competent. They should receive specific training in what is expected of them including a comprehensive understanding of the quality system.

Audits should be scheduled and announced well in advance. A checklist is essential to ensure complete coverage of the important aspects of the audit. It also enhances objectivity of findings and credibility of the audit team. The checklist should include the following:

- Staff's awareness of the quality manual
- Analytical procedure selection, control and validation
- Control of reagents and standards
- Equipment calibration and maintenance records
- Adequacy of case reports and notes and their disposition
- Evidence handling procedures
- Proficiency testing and interlaboratory comparison studies
- Personnel training records
- Handling of deficiencies and remedial action
- Laboratory orderliness and health and safety measures

A written report should be prepared soon after the audit has been conducted. This report must identify problem areas and the remedial action required. Documentation of annual audits conducted between accreditation cycles must be maintained and made available during an ASCLD/LAB inspection (1.4.2.3).

The quality system requires that laboratory management conduct a review at least once yearly to ensure the continued suitability and effectiveness of such a system.

1.4.2.4	DOES THE LABORATORY CONDUCT AND DOCUMENT AN ANNUAL REVIEW OF ITS QUALITY SYSTEM?	**(E)** **Y N N/A**

DISCUSSION

In addition to the annual audit, an annual review of the quality system is essential for ensuring that laboratory management can continue to be confident that all measures are being taken to provide the highest quality service using "state-of-the-art" forensic technologies. While the annual audit (1.4.2.3) determines ongoing compliance with accreditation standards and other laboratory requirements, the annual quality review (1.4.2.4) considers the overall system and attempts to answer the basic question, "Is the current quality system effective?". Findings of the review form the basis for changes to the quality system.

A review of audit reports may form the basis for changes in the quality system. Changes may include new or improved control activities to better ensure the quality of the laboratory work product, or a change in the quality system could be related to the general acceptance and incorporation of advanced technologies which may require new specific control activities for ensuring quality. Another reason for modifications to the quality system is any change in the legal requirements for accepting forensic evidence in the judicial environment in which the laboratory operates.

Documentation of annual quality system reviews conducted between accreditation cycles, although not submitted to ASCLD/LAB, must be maintained by the laboratory and made available during an ASCLD/LAB inspection.

Procedures used must be generally accepted in the field or supported by data gathered and recorded in a scientific manner.

1.4.2.5	ARE THE PROCEDURES USED GENERALLY ACCEPTED IN THE FIELD OR SUPPORTED BY DATA GATHERED AND RECORDED IN A SCIENTIFIC MANNER?	**(E)** **Y N N/A**

DISCUSSION

Since a variety of scientific procedures may validly be applied to a given problem, standards and criteria for assessing procedures need to remain flexible. In forensic science, well established procedures are often scattered throughout peer-reviewed literature as well as in less formal documents obtained from conference proceedings and in-house laboratory manuals; furthermore, minor modifications to improve published methods can be implemented by a laboratory as appropriate to the particular need. The important point is that the procedures used must be demonstrably capable of producing valid results.

Even though a procedure may be widely used, there is often no single document articulating a professional consensus as to its acceptability. In these circumstances, the board of directors relies on the technical knowledge of its members, the inspection team and/or an ASCLD/LAB committee comprised of recognized experts in the particular procedure to interpret this standard (1.4.2.5).

For some types of examinations, more formal, professional consensus standards may provide guidance in determining compliance with 1.4.2.5 (e.g., the *Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories*).

New technical procedures must be validated to prove their efficacy in examining evidence material before being implemented on casework.

1.4.2.6	ARE NEW TECHNICAL PROCEDURES SCIENTIFICALLY VALIDATED BEFORE BEING USED IN CASEWORK AND IS THE VALIDATION DOCUMENTATION AVAILABLE FOR REVIEW?	**(E) Y N N/A**

DISCUSSION

The proper validation of a new technical procedure (1.4.2.6) requires a complete understanding of the theoretical basis for the method. Such knowledge provides a means of assessing the specificity and limitations of the method and predicting possible sources of error. The method must be tested using known samples. Should the new method parallel or supersede an existing one, the two should be compared on split samples. The known samples should be designed to resemble actual evidence materials as closely as possible so that the effects of such factors as matrix, sample age, degradative environment, and sample homogeneity are taken into account. This is particularly important when attempting to apply to forensic materials some methodology originally developed for routine chemical or clinical samples. If the analysis provides quantitative data, the validation study should include an estimation or its accuracy and precision at concentrations which are representative of casework samples (1.4.2.6).

The method must be subjected to a validation study. This may be done internally, externally, and/or collaboratively. Exchange of blind and reference samples with another competent laboratory is particularly useful for detecting any internal systematic error. Written documentation for each validation study needs to be maintained for future reference.

The laboratory must maintain written copies of appropriate technical procedures.

1.4.2.7	ARE THE TECHNICAL PROCEDURES USED BY THE LABORATORY DOCUMENTED AND ARE THE DOCUMENTS AVAILABLE TO LABORATORY PERSONNEL FOR REVIEW?	**(E) Y N N/A**

Controls and standard samples must be used and documented in the case record to ensure the validity of the testing parameters and, thereby, the conclusion.

1.4.2.8	ARE APPROPRIATE CONTROLS AND STANDARDS SPECIFIED IN THE PROCEDURES AND ARE THEY USED AND DOCUMENTED IN THE CASE RECORD TO ENSURE THE VALIDITY OF EXAMINATION RESULTS?	**(E) Y N N/A**

The quality of the standard samples and reagents must be adequate for the procedure used.

1.4.2.9	IS THE QUALITY OF THE STANDARD SAMPLES AND REAGENTS ADEQUATE FOR THE PROCEDURE USED?	**(E) Y N N/A**

All reagents must be routinely tested for their reliability.

1.4.2.10	DOES THE LABORATORY ROUTINELY CHECK THE RELIABILITY OF ITS REAGENTS?	**(E) Y N N/A**

DISCUSSION

The written technical procedures (1.4.2.7) should include descriptions of sample preparation methods, controls, standards, and calibration procedures. They should also include a discussion of precautions, possible sources of error, and literature references. Reagents must be labeled with the identity of the reagent and the date of preparation or "lot" number. Records must be maintained identifying who made the reagent and that it was tested and worked as expected to check the reliability of the reagent. This will give the examiner the necessary resource material to support written conclusions and expert testimony (1.4.2.9 to 1.4.2.10).

Although many acceptable procedures may exist to perform a particular examination, considerable variations in case samples require that forensic scientists have the flexibility to exercise discretion in selecting the method most appropriate to the problem at hand. The laboratory director needs to ensure that the procedures used meet acceptable scientific standards [e.g., the use of positive and negative controls (1.4.2.8)]. Additionally, standards and reagents used must be of satisfactory quality. A certificate of analysis received with a drug or other standard will generally serve to establish the quality of the standard (1.4.2.9).

Instruments/equipment should be adequate for the procedures used.

1.4.2.11	ARE THE INSTRUMENTS/EQUIPMENT ADEQUATE FOR THE PROCEDURES USED?	**(I)** **Y N N/A**

Instruments/equipment should be maintained in proper working order.

1.4.2.12	ARE THE INSTRUMENTS/EQUIPMENT IN PROPER WORKING ORDER?	**(I)** **Y N N/A**

Instruments/equipment must be properly calibrated and calibration records maintained for all calibrated instruments.

1.4.2.13	ARE THE INSTRUMENTS/EQUIPMENT PROPERLY CALIBRATED?	**(E)** **Y N N/A**

The laboratory must create and maintain a case record for administrative and examination documentation generated or received by the laboratory on each case which it receives. Examination documentation such as notes, worksheets, photographs, spectra, printouts, charts, and other data or records which support conclusions must be generated and kept in the case record.

1.4.2.14	DO THE EXAMINERS GENERATE AND DOES THE LABORATORY MAINTAIN, IN A CASE RECORD, ALL THE NOTES, WORKSHEETS, PHOTOGRAPHS, SPECTRA, PRINTOUTS, CHARTS AND OTHER DATA OR RECORDS USED BY EXAMINERS TO SUPPORT THEIR CONCLUSIONS?	**(E)** **Y N N/A**
1.4.2.15	DOES THE LABORATORY MAINTAIN CASE RELATED ADMINISTRATIVE DOCUMENTATION GENERATED AND RECEIVED, IN A RETRIEVABLE FORM?	**(E)** **Y N N/A**

DISCUSSION

A laboratory case record consists of both examination documentation and administrative documentation which may be received or generated by the laboratory. The laboratory must maintain each case record in a designated location or locations, as specified by its policy, under a unique case designator, usually a laboratory case number. The laboratory must have a written policy regarding its case designator system and the documentation that is required for a case record.

Administrative documentation includes records of case-related conversations, evidence receipts, description of evidence packaging and seals, subpoenas, investigative reports and other pertinent information. All administrative documentation, received or generated by the laboratory, for a specific case, must be identified with the unique identifier for that case. The unique identifier may be hand written or machine generated. Multi-paged administrative documents which are bound together, in some manner, may be identified by a unique identifier on the front page of the document.

Examination documentation is usually generated by the laboratory and includes references to procedures followed, tests conducted, standards and controls used, diagrams, printouts, autoradiographs, photographs, documentation of observations, and results of examinations. The laboratory's unique case identifier and the examiner's handwritten initials must be on each page of the examination documentation in the case record. When examination documentation is prepared by individuals other than the one who interprets the findings, prepares the reports and/or testifies concerning the documentation, the individuals who prepare documentation must initial their work product and the person preparing the report must initial each page of the documentation. The electronic equivalent of handwritten initials or signature are acceptable when the laboratory can demonstrate that the electronic signature is secure and can only be applied by the individual whom the electronic initials or signature represent. When examination documentation is recorded on both sides of a page, each side must be treated as a separate page.

Examination documentation, such as case notes and records of observations whether electronic or hard copy, are subject to subpoena or discovery and must be of a permanent nature. Generally, handwritten notes and observations must be in ink. Exceptions to this requirement may be made when environmental conditions, such and extreme cold or rain, prevent the use of inks. Pencil (including color) may be appropriate for diagrams or making tracings. Nothing in the examination documentation may be obliterated or erased. Changes, alterations and additional notations, including interlineations, made in case notes must be initialed by the person making the additions. Dates should be recorded throughout the documentation to indicate when the work was performed.

When instrumental analyses are conducted, operating parameters must be recorded. Instrument charts and graphs on analyses that are batched (e.g., blood alcohol determinations and drug screening), may be more appropriately kept in a central location as specified in the laboratory's procedure manuals. When data from multiple cases is recorded on a single printout, the printout, may be kept in a single file and referenced in all files for which data was generated. The unique identifier of each case for which data was generated must be appropriately recorded on the printout.

Examination documentation, such as instrumental data, which bears the appropriate identification (i.e. unique identifier(s) and the examiner's initials) on an original document, may be copied for filing in multiple places without the necessity of placing original identifiers on each copy.

It is acceptable for laboratory procedures to specify where specific case record components (e.g., spectra of standards or calibration documentation) are maintained without a reference to the location of these records in the case file.

Documentation to support conclusions must be such that in the absence of the examiner, another competent examiner or supervisor could evaluate what was done and interpret the data. Acceptable ways to document the basis for conclusions derived from evidence examination, include, but are not limited to: a narrative description of the examination process and observations made, photographs, photocopies, diagrams, drawings, worksheets which provide spaces or sections for the insertion of data or other observations made during various steps of the examination process, or a combination of two or more of these approaches.

Abbreviations and symbols are acceptable in examination documentation, if the meaning of the abbreviations and/or symbols are readily comprehensible to a reviewer and the meaning of the abbreviations or symbols are clearly documented in the laboratory's procedures.

It is recommended that when examination documentation consists of multiple pages, a page numbering system indicating total number of pages be used (e.g., page __ of __).

It is essential that a representative number of reports be subjected to a technical review.

1.4.2.16	DOES THE LABORATORY HAVE, USE AND DOCUMENT A SYSTEM OF TECHNICAL REVIEW OF THE REPORTS TO ENSURE THAT THE CONCLUSIONS OF ITS EXAMINERS ARE REASONABLE AND WITHIN THE CONSTRAINTS OF SCIENTIFIC KNOWLEDGE?	**(E)** **Y N N/A**

DISCUSSION

Technical review of casework is an essential component of the laboratory's quality assurance program. The laboratory must have a written policy to establish the parameters for technical review (e.g., the number or percentage of case reports to be reviewed). The policy must define the scope of the review (e.g., review of bench notes, data, and other documents which form the basis for the scientific conclusion). The review policy must describe a course of action to be taken, should a discrepancy be found. The policy must also define how technical reviews are documented.

Technical reviews must be carried out on a sample of completed case records as defined by the laboratory's policy (e.g., 20% or six cases, whichever is greater, per examiner per month). The sampling rate may vary depending upon the situation, as defined by the laboratory's policy (e.g., a new examiner may have 100% of cases reviewed while a very experienced examiner may have only a few reviewed each month).

Technical reviews must be conducted by individuals having expertise gained through training and experience in the discipline being reviewed. An individual conducting the technical review need not be an active examiner or currently being proficiency tested. The reviewer must have sufficient knowledge of the discipline to verify compliance with the laboratory's technical procedures and that the conclusions reached are supported with the examination documentation.

Technical reviews, while important to the laboratory's quality assurance program, should not be carried out to the extent that it shifts the perceived responsibility for the scientific findings from the examiner to the reviewer (1.4.2.16). While not required, it is recommended that technical reviews be conducted prior to the release of reports on the cases reviewed.

Administrative reviews must be conducted to ensure the completeness and correctness of the reports issued.

1.4.2.17	DOES THE LABORATORY CONDUCT AND DOCUMENT ADMINISTRATIVE REVIEWS OF ALL REPORTS ISSUED?	**(E)** **Y N N/A**

DISCUSSION

Administrative review is an additional form of casework review which is conducted to enhance the quality of a report's administrative content. The laboratory must carry out some form of administrative review on all case reports. Laboratory policy must define the scope of administrative reviews, who may conduct administrative reviews and how the reviews are documented. All reports must be administratively reviewed before being issued. An administrative review may be conducted by the author of the report.

The laboratory must have and follow a written procedure whereby the testimony of each examiner is monitored at least once every year.

1.4.2.18	DOES THE LABORATORY MONITOR THE TESTIMONY OF EACH EXAMINER AT LEAST ANNUALLY AND IS THE EXAMINER GIVEN FEEDBACK FROM THE EVALUATION?	**(E)** **Y N N/A**

DISCUSSION

The presentation of testimony is the culmination of the work performed by a forensic examiner. Accordingly, it is vitally important that the effectiveness of each examiner in this respect be reviewed. The laboratory must have and follow a written procedure whereby the testimony of each examiner is monitored at least once each year. Methods by which monitoring may be carried out include:

- observation of the testimony by a supervisor or a peer,
- review of transcripts of testimony given by an examiner,
- having one or more officers of the court fill out and return a testimony evaluation form (checklist and/or comment sheet) provided by the laboratory, or
- telephonic solicitation by a laboratory director or supervisor to one or more officers of the court for responses to the evaluation form.

A laboratory may choose to use one or a combination of methods to accomplish the monitoring. For monitoring of testimony to be of value, feedback to the examiner is necessary. The examiner must be given feedback on the positive aspects of the testimony as well as the areas that need improvement. Areas that should be evaluated include appearance, poise, performance under cross-examination, ability to present information in an understandable manner to a lay jury and most importantly a determination that the testimony given is consistent with the work documented in the case file. Neither review of transcripts or feedback from the court officials can provide the quality of evaluation that is available through direct observation; therefore, especially for new examiners, supervisory observation in the courtroom is the recommended method. The monitoring procedure should also prescribe the remedial action that is to be taken should the evaluation be less than satisfactory.

The laboratory must have a written procedure which it uses to initiate a review and to take corrective action when the laboratory has an indication of a significant problem with a technical procedure or the work of an analyst.

1.4.2.19	IF THE LABORATORY HAS AN INDICATION OF A SIGNIFICANT TECHNICAL PROBLEM, IS THERE A PROCEDURE IN WRITING AND IN USE WHEREBY THE LABORATORY INITIATES A REVIEW AND TAKES ANY CORRECTIVE ACTION REQUIRED?	**(E)** **Y N N/A**

DISCUSSION

When the validity of results become questioned, for example, through proficiency testing or quality control data, the procedure(s) involved must be reviewed and, if necessary, withdrawn from service. The procedure(s) may be reinstated only when exhaustive review and testing demonstrate that the procedure(s) are not, or are no longer, the source of the error.

1.4.3 PROFICIENCY TESTING

PRINCIPLE

Proficiency testing is an integral part of an effective quality assurance program. It is one of many measures used to monitor performance and to identify areas where improvement may be needed.

STANDARDS AND CRITERIA

Each laboratory must have a documented program of proficiency testing which measures the capability of its examiners and the reliability of its analytical results.

1.4.3.1	DOES THE LABORATORY HAVE A DOCUMENTED PROGRAM OF PROFICIENCY TESTING?	**(E)** **Y N N/A**

DISCUSSION

A proficiency testing program is a reliable method of verifying that the laboratory's technical procedures are valid and that the quality of each examiner's work is being maintained. The laboratory's proficiency testing program must meet all of the requirements specified in the ASCLD/LAB Proficiency Review Program (Attachment 1). It is essential that proficiency tests be properly designed, appropriately administered, and fairly evaluated. Examiners' proficiency is tested only if they complete the testing unaware of the results expected. In order to demonstrate compliance with proficiency testing standards, the laboratory must document that each examiner has successfully completed either an internal and/or external proficiency test in his/her respective discipline(s).

Proficiency testing should test the laboratory's analytical procedures, how the procedures are applied, and how the results are interpreted. In order for proficiency testing to be most meaningful as a part of a laboratory's overall quality assurance program, the analytical procedures used, the approach to conducting the tests and the process for interpreting results should simulate, as closely as possible, the way these processes are carried out in actual casework examinations. However, proficiency tests should not be subject to policies adopted by a laboratory for efficiency or expediency of casework. All parts of a proficiency test provided by an approved test provider should be examined as completely as the laboratory's analytical capability allows. As

an example, if ten (10) questioned prints are provided for comparison in a latent print proficiency test, each of the prints should be examined and the results reported, even if the laboratory's policy calls for the analyst to stop examining latent prints in actual casework once an identification has been made. Despite its operational policies, the laboratory should demonstrate the competence of its analysts and the quality performance of the laboratory. A laboratory should bring to bear whatever procedures and protocols it possesses to derive the correct answer(s) to the question(s) posed by the proficiency test.

When a laboratory as a routine practice, for certain types of evidence, has multiple analysts conduct different parts of an analytical procedure; it is acceptable for multiple analysts to jointly work a proficiency test in a similar manner. Team analysis of proficiency tests, which can occur in disciplines such as DNA, in which a technician normally prepares a sample for DNA typing by an analyst, can permit both individuals to share credit for the proficiency test to the extent that they perform these duties on casework.

A single proficiency test may be shared among several analysts if the answers are not shared before the test result is reported to the proficiency test provider. Most proficiency test providers will accept reported results from one individual when only one test is purchased, therefore only one individual can be credited for an external test from an approved test provider.

The laboratory should employ technical review, verification and administrative review policies as they are normally applied to case work. If technical reviews or verifications are not routinely conducted on the majority of case work examinations, routinely employing these procedures on proficiency tests prior to returning the tests to the providers does not provide the optimum benefit from this quality assurance process for the laboratory.

Successful completion shall mean either the obtaining of a correct response to the proficiency test or that corrective actions were completed pursuant to the Proficiency Review Program (if applicable) and/or the laboratory's written policies (1.4.3.1 and 1.4.3.2). The documentation of a laboratory's proficiency testing program must therefore include: how the test samples are obtained/prepared, who is tested and in what time frame, which laboratory staff member directs the program, how and where the testing information is maintained, and what corrective actions are taken if required and who oversees them. The testing process should be well understood by all participants.

The laboratory must participate in proficiency testing programs in which samples are provided by an external test provider. ASCLD/LAB approved providers must be used where available.

1.4.3.2	DOES THE LABORATORY PARTICIPATE IN PROFICIENCY TESTING PROGRAMS CONDUCTED BY APPROVED TEST PROVIDERS OR BY OTHER EXTERNAL PROVIDER(S) WHEN NO APPROVED PROVIDER IS AVAILABLE?	**(E)** **Y N N/A**

DISCUSSION

A laboratory must participate annually in at least one external proficiency test for each discipline in which it provides services, with the exception of DNA. DNA proficiency testing requirements are included under the Biology discipline requirements. The required external proficiency test must consist of a sample obtained from an ASCLD/LAB approved test provider, when an approved provider is available. A current listing of approved test providers is available at www.ascld-lab.org.

Whenever a laboratory is accredited in a discipline for which there is not an appropriate test from an approved test provider, the laboratory must locate a source of an external test in that discipline. A laboratory is never

exempted from the requirement to take an annual external proficiency test in each discipline in which casework is performed.

Each Examiner should be proficiency tested annually in each subdiscipline in which casework is performed.

1.4.3.3	WAS EACH EXAMINER PROFICIENCY TESTED ANNUALLY IN EACH SUBDISCIPLINE IN WHICH CASEWORK WAS PERFORMED?	**(I)** **Y N N/A**

Laboratories should proficiency test annually in clearly defined subdisciplines in which the laboratory conducts examinations. Although it is not intended to identify all subdisciplines in which proficiency testing should be conducted, generally recognized subdisciplines include: DNA and serology in the biology discipline; fire debris, explosives, fibers, GSR, glass, hairs and paint in the trace evidence discipline; firearms and toolmarks in the firearms/toolmarks discipline; alcohol and drugs in the toxicology discipline; computer forensics, audio, video and imaging in the digital evidence discipline. Although footwear/tiretrack and other similar impression evidence may be assigned to different sections in different laboratories, it is recognized as a subdiscipline.

The laboratory should conduct annual proficiency testing in each discipline using re-examination or blind techniques.

1.4.3.4	DOES THE LABORATORY CONDUCT PROFICIENCY TESTING USING RE-EXAMINATION OR BLIND TECHNIQUES?	**(I)** **Y N N/A**

DISCUSSION

In addition to participating in external proficiency testing, a laboratory should conduct proficiency testing using blind tests prepared internally or externally and submitted as normal casework evidence or by re-examination by another examiner of evidence on which casework was previously completed. A laboratory must perform at least one such test annually in at least one-half of the forensic disciplines in which it provides services to satisfy the requirements of criterion 1.4.3.4.

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2. PERSONNEL QUALIFICATIONS

2.1 MANAGEMENT

PRINCIPLE

The laboratory director should be knowledgeable of the scientific functions and forensic aspects of the laboratory's work, preferably through experience as a forensic scientist.

STANDARDS AND CRITERIA

The laboratory director should have a minimum of a baccalaureate degree in a natural science, criminalistics or a closely related field. If the director lacks a scientific background, then there should be support within management by personnel with appropriate scientific background.

2.1.1	DOES THE LABORATORY DIRECTOR POSSESS A DEGREE IN A NATURAL SCIENCE, CRIMINALISTICS OR IN A CLOSELY RELATED FIELD, OR IS THE LABORATORY DIRECTOR SUPPORTED BY SCIENTIFIC PERSONNEL OF SUFFICIENT MANAGERIAL RANK AND AUTHORITY?	**(I)** **Y N N/A**

A laboratory director should have at least five years of forensic science experience performing casework in one of the ASCLD/LAB accredited disciplines.

2.1.2	DOES THE LABORATORY DIRECTOR HAVE AT LEAST FIVE YEARS OF FORENSIC SCIENCE EXPERIENCE?	**(D)** **Y N N/A**

Additional education in management or business administration by college course work or short training courses (or both) is recommended.

2.1.3	DOES THE LABORATORY DIRECTOR HAVE SOME FORMAL TRAINING IN MANAGEMENT?	**(D)** **Y N N/A**

The laboratory director should have at least two years of experience in management.

2.1.4	DOES THE LABORATORY DIRECTOR HAVE AT LEAST TWO YEARS OF MANAGERIAL EXPERIENCE?	**(D)** **Y N N/A**

2.2 CONTROLLED SUBSTANCES

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate degree in a natural science, criminalistics or in a closely related field is required.

2.2.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE IN A NATURAL SCIENCE, CRIMINALISTICS OR IN A CLOSELY RELATED FIELD AND DOES EACH HAVE EXPERIENCE/TRAINING COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures as applied to the tasks performed.

2.2.2	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test.

2.2.3	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.2.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Controlled Substances Examiners should be able to select the appropriate procedure and equipment necessary for reliable qualitative and quantitative analyses of controlled substances and, if necessary, to develop a valid procedure. They should also be able to evaluate the significance of test results (2.2.2).

2.3 TOXICOLOGY

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate degree in a natural science, toxicology, criminalistics or in a closely related field is required.

2.3.1	DOES EACH EXAMINER HAVE A BACCALAUREATE DEGREE IN A NATURAL SCIENCE, TOXICOLOGY, CRIMINALISTICS OR IN A CLOSELY RELATED FIELD AND DOES EACH HAVE EXPERIENCE/TRAINING COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures applied to the tasks performed.

2.3.2	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test.

2.3.3	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.3.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Toxicologists should be competent to perform qualitative and quantitative analyses for drugs, metabolites, and other toxic substances in biological materials. They should also be able to make a systematic search for such substances and apply appropriate extractive and separatory procedures (2.3.2).

2.4 TRACE EVIDENCE

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate degree in a natural science, criminalistics or in a closely related field is required.

2.4.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE IN A NATURAL SCIENCE, CRIMINALISTICS OR IN A CLOSELY RELATED FIELD AND DOES EACH HAVE EXPERIENCE/TRAINING COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures applied to the tasks performed.

2.4.2	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

A competency test must be successfully completed prior to working cases of each evidence type.

2.4.3	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST IN EACH OF THE SUBDISCIPLINES PROCESSED PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.4.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Trace Evidence Examiners should have a basic knowledge of chemistry, microscopy, and the concept of individualization (2.4.2).

2.5 BIOLOGY

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate degree in a natural science, criminalistics or in a closely related field is required.

2.5.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE IN A NATURAL SCIENCE, CRIMINALISTICS OR IN A CLOSELY RELATED FIELD AND DOES EACH HAVE EXPERIENCE/TRAINING COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**
2.5.2	DOES EACH EXAMINER PERFORMING DNA ANALYSIS HAVE EDUCATION, TRAINING AND EXPERIENCE CONSISTENT WITH THOSE REQUIRED BY THE QUALITY ASSURANCE AUDIT DOCUMENT?	**(E)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures applied to the tasks performed.

2.5.3	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test.

2.5.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually?

2.5.5	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

Two proficiency tests must be successfully completed by each DNA examiner annually.

2.5.6	DID EACH EXAMINER PERFORMING DNA ANALYSIS SUCCESSFULLY COMPLETE TWO ANNUAL PROFICIENCY TESTS FROM AN APPROVED TEST PROVIDER?	**(E)** **Y N N/A**

DISCUSSION

Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories require that two external proficiency tests from approved test providers be completed annually by DNA examiners as well as by technical support personnel performing DNA analytical techniques. This applies even though the technicians may not furnish results/conclusions. In taking these tests examiners must use all DNA analytical methods to the extent which they perform casework examinations.

Serologists should have a knowledge of basic biological sciences and sufficient knowledge of chemistry to understand the procedures used. They should also have adequate knowledge of the statistics used in forensic serology (2.5.2)

DNA Examiners should have a knowledge of basic biological sciences and sufficient knowledge of biochemistry, chemistry, and molecular biology to understand the mechanisms of the test procedures used. They should also have an adequate knowledge of population genetics and the statistics used in forensic DNA examinations (2.5.2).

2.6 FIREARMS/TOOLMARKS

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Firearms/toolmarks examiners should have a baccalaureate degree with science courses.

2.6.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE WITH SCIENCE COURSES?	**(I)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures used as applied to the tasks performed.

2.6.2	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have education and experience/training commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified examiner has been completed.

2.6.3	DID EACH EXAMINER HAVE EXTENSIVE TRAINING FROM A QUALIFIED EXAMINER AND DOES EACH HAVE EXPERIENCE COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must successfully complete a competency test.

2.6.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST PRIOR TO ASSUMING CASE WORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.6.5	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Firearms/Toolmarks Examiners should have adequate knowledge of microscopy, special lighting techniques, preparation of impressions or casts, techniques of comparative examination, and the concept of individualization. They should also have adequate knowledge of the nomenclature, operability/operation of firearms, bullet, and cartridge case comparisons, powder and shot patterns, distance determinations, and type of firearm determination from a discharged cartridge case or bullet (2.6.2).

2.7 QUESTIONED DOCUMENTS

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Questioned document examiners should have a baccalaureate degree with science courses.

2.7.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE WITH SCIENCE COURSES?	**(I)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures used as applied to the tasks performed.

2.7.2	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have education and training/experience commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified document examiner has been completed.

2.7.3	DID EACH EXAMINER HAVE EXTENSIVE TRAINING FROM A QUALIFIED EXAMINER AND DOES EACH HAVE EXPERIENCE COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test.

2.7.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST PRIOR TO ASSUMING CASE WORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.7.5	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Questioned Documents Examiners should have knowledge of the principles of photography, microscopy, comparative examination, and individualization. They should also have adequate knowledge of writing or printing instruments, ink, paper, and copying processes (2.7.2).

2.8 LATENT PRINTS

PRINCIPLE

Examiners must have mastery of the theory, procedures and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Latent print examiners should have a baccalaureate degree with science courses.

2.8.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE WITH SCIENCE COURSES?	**(I)** **Y N N/A**

Examiners must have a good understanding of the concept of individualization and the principles, uses and limitations of the instruments, and the methods and procedures used as applied to the tasks performed.

2.8.2	DOES EACH EXAMINER UNDERSTAND THE INSTRUMENTS, AND THE METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have education and training/experience commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified latent print examiner has been completed.

2.8.3	DID EACH EXAMINER HAVE EXTENSIVE TRAINING FROM A QUALIFIED EXAMINER AND DOES EACH HAVE EXPERIENCE COMMENSURATE WITH THE EXAMINATIONS AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test.

2.8.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.8.5	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Latent Prints Examiners should have knowledge of comparative examination techniques, methods for processing, recovery and preservation of latent prints, and common systems of classification (2.8.2).

2.9 TECHNICAL SUPPORT

PRINCIPLE

Education and duties of the technical support staff must conform to the written job specifications and description.

STANDARDS AND CRITERIA

The individual must meet the specification of the job description.

2.9.1	DO TECHNICAL SUPPORT PERSONNEL MEET THE REQUIREMENTS OF THEIR JOB DESCRIPTIONS?	**(E)** **Y N N/A**

DISCUSSION

Technical support personnel may perform such duties as instrumental analysis of drugs samples although they do not have a baccalaureate degree in a natural science or in criminalistics, as long as all data is interpreted by an experienced and degreed analyst.

The job description and the duties performed must be in agreement.

2.9.2	ARE THE JOB DESCRIPTIONS AND THE DUTIES PERFORMED IN AGREEMENT?	**(E)** **Y N N/A**

Technical support staff must have successfully completed an appropriate competency test.

2.9.3	DID EACH MEMBER OF THE TECHNICAL SUPPORT STAFF SUCCESSFULLY COMPLETE AN APPROPRIATE COMPETENCY TEST PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

Technical support personnel must successfully complete an appropriate proficiency test annually.

2.9.4	DID ALL TECHNICAL SUPPORT PERSONNEL SUCCESSFULLY COMPLETE AN APPROPRIATE PROFICIENCY TEST, ANNUALLY?	**(E)** **Y N N/A**

Two proficiency tests must be successfully completed annually by all technical support personnel performing DNA analysis.

2.9.5	DID ALL TECHNICAL SUPPORT PERSONNEL PERFORMING DNA ANALYSIS SUCCESSFULLY COMPLETE TWO ANNUAL PROFICIENCY TESTS FROM AN APPROVED TEST PROVIDER?	**(E)** **Y N N/A**

DISCUSSION

Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories require that technical support personnel performing DNA analytical techniques complete two annual proficiency tests from an approved provider. This applies even though the technicians may not furnish results/conclusions.

Technical Support Staff should have knowledge of techniques and methods used in assigned tasks (2.9.1).

2.10 CRIME SCENE

PRINCIPLE

Examiners must have mastery of the theory, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

The examiner must meet the requirements of the job description.

2.10.1	DO EXAMINERS MEET THE REQUIREMENTS OF THEIR JOB DESCRIPTIONS?	**(E)** **Y N N/A**

DISCUSSION

Examiners perform such varied duties as evidence identification, documentation and collection, along with evidence evaluation and reconstruction. Examiners must have education and training commensurate with the examinations, documentation and testimony provided.

Examiners must have a good understanding of the concept and theory of scene security and integrity, and the uses and limitations of the equipment, methods and procedures used to document and process crime scenes, as applied to the tasks performed.

2.10.2	DOES EACH EXAMINER UNDERSTAND THE EQUIPMENT, METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have training and experience commensurate with the examinations, documentation and testimony provided, as applied to the tasks performed. Independent examinations and documentation at crime scenes must not be undertaken until extensive instruction from a qualified examiner has been completed.

2.10.3	DID EACH EXAMINER HAVE EXTENSIVE TRAINING FROM A QUALIFIED EXAMINER AND DOES EACH HAVE EXPERIENCE COMMENSURATE WITH THE EXAMINATIONS/DOCUMENT-ATION AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test(s) as applied to the task(s) performed.

2.10.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST(S) PRIOR TO PRIMARY RESPONSIBILITY FOR THE EXAMINATION, DOCUMENTATION AND PROCESSING OF A CRIME SCENE?	**(E)** **Y N N/A**

A proficiency test must be completed by each person conducting crime scene examinations at least annually. The proficiency test should reflect the types of procedures, methods and equipment as applied to the typical task(s) performed.

2.10.5	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Crime scene proficiency testing may be addressed with proficiency tests of specific crime scene skills from an external test provider, if available; by inter or intra laboratory tests of specific skills; by a qualified examiner or supervisor directly observing the examiner conducting the crime scene examination; or by the evaluation of a mock crime scene.
Individual skills, such as evidence identification, collection, documentation and packaging, and crime scene reconstruction, should be tested. To achieve this, a combination of the methods listed in the preceding paragraph may be used to ensure evaluation of both specific skills and general crime scene processing and decision making.

Crime Scene Examiners should have a general knowledge of proper evidence recognition, documentation, and preservation techniques. In addition, examiners must have specific knowledge of examination and collection methods, procedures and equipment used in their assigned tasks at the scene (2.10.2).

2.11 DIGITAL EVIDENCE

PRINCIPLE

Examiners must have mastery of the theories, procedures, and techniques necessary to produce reliable results and conclusions.

STANDARDS AND CRITERIA

Digital evidence examiners should have a baccalaureate degree with science courses.

2.11.1	DOES EACH EXAMINER POSSESS A BACCALAUREATE DEGREE WITH SCIENCE COURSES?	**(I)** **Y N N/A**

Examiners must have a good understanding of the principles, uses and limitations of the hardware, software, and the methods and procedures as applied to the tasks performed.

2.11.2	DOES EACH EXAMINER UNDERSTAND THE EQUIPMENT, PROGRAMS, METHODS AND PROCEDURES USED?	**(E)** **Y N N/A**

Examiners must have education and training/experience commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified examiner has been completed.

2.11.3	DOES EACH EXAMINER HAVE EXPERIENCE COMMENSURATE WITH THE EXAMINATIONS/ DOCUMENTATION AND TESTIMONY PROVIDED?	**(E)** **Y N N/A**

Examiners must have successfully completed a competency test.

2.11.4	DID EACH EXAMINER SUCCESSFULLY COMPLETE A COMPETENCY TEST IN EACH SUBDISCIPLINE PRIOR TO ASSUMING CASEWORK RESPONSIBILITY?	**(E)** **Y N N/A**

A proficiency test must be successfully completed by each examiner at least annually.

2.11.5	DID EACH EXAMINER SUCCESSFULLY COMPLETE AN ANNUAL PROFICIENCY TEST?	**(E)** **Y N N/A**

DISCUSSION

Digital Evidence Examiners should have knowledge of systems and procedures to duplicate, recover, handle/preserve and examine digital evidence. They should also have working knowledge of hardware and software used in digital evidence examinations. Although digital evidence can include digital images, the application of imaging science and technology is not limited to Digital Evidence within a laboratory (2.11.2).

GENERAL DISCUSSION

Appropriate personnel qualifications are essential for producing reliable results. Formalized training is recommended.

The requirement for a Baccalaureate Degree to practice forensic science in certain disciplines will not be waived because someone in a discipline in which a degree is not essential may want to be cross-trained into a discipline in which a degree is mandatory.

A qualified individual, whose degree is in a field other than a natural science or criminalistics, but who has taken extensive class work in biology and/or chemistry and has numerous years of experience will meet the educational requirements on a case by case basis as determined by the Board. However, new employees must comply with the criteria as written.

Some experience/training must be received in a forensic laboratory. Credit for other experience/training can be evaluated as appropriate in a particular case. Work experience and training should be considered with respect to intensity and diversity. Experience/training outside the crime laboratory may be substituted for experience/training in the crime laboratory to the extent that it has been demonstrated to be relevant and sufficient. If there is little diversity in the person's work (e.g., blood alcohol analyses or marijuana identification) correspondingly shorter periods of training/experience may be sufficient.

Examiners may be acquainted with the methods that are generally accepted in the discipline. All examiners must be able to articulate concepts and provide opinion testimony relevant to assigned tasks. Pertinent training should also be given to all trainees prior to appearance as an expert witness in court. This may include moot court, actual court observation and appropriate reading materials.

Regardless of academic qualifications, trainees must have successfully completed adequate competency testing in all applicable areas of examinations prior to performing independent case-connected examinations. Competency testing should include evaluation of knowledge of existing literature, written and/or oral examinations, examination and identification of known and unknown material, and moot court.

Personnel standards in this manual should be considered as general requirements for evaluating the laboratory personnel's potential to produce a quality product. They should not be construed as criteria for certification of individuals in specialty fields.

3. PHYSICAL PLANT

3.1 SPACE

PRINCIPLE

In order for the laboratory to achieve its goals and objectives, adequate and appropriate space should be allocated for each activity and/or function.

STANDARDS AND CRITERIA

Each employee should have adequate work space to accomplish assigned tasks.

3.1.1	DOES EACH EMPLOYEE HAVE ADEQUATE WORK SPACE TO ACCOMPLISH ASSIGNED TASKS?	**(I)** **Y N N/A**

Sufficient space should be provided for storage of supplies, equipment and tools.

3.1.2	IS THERE SUFFICIENT SPACE PROVIDED FOR STORAGE OF SUPPLIES, EQUIPMENT AND TOOLS?	**(D)** **Y N N/A**

Examiners should have space available for writing reports and other official communications.

3.1.3	IS THERE ADEQUATE SPACE AVAILABLE FOR EXAMINERS FOR WRITING REPORTS AND OTHER OFFICIAL COMMUNICATIONS?	**(I)** **Y N N/A**

Adequate and appropriate space should exist for records and reference materials.

3.1.4	IS THERE ADEQUATE AND APPROPRIATE SPACE AVAILABLE FOR RECORDS, REFERENCE WORKS AND OTHER NECESSARY DOCUMENTS?	**(I)** **Y N N/A**

Sufficient space should be available for instrumentation/equipment to facilitate its operation.

3.1.5	IS ADEQUATE SPACE AVAILABLE FOR INSTRUMENTATION/ EQUIPMENT TO FACILITATE ITS OPERATION?	**(I)** **Y N N/A**

Accessories should be stored near instrumentation/equipment to facilitate its use and operation.

3.1.6	ARE ACCESSORIES STORED NEAR INSTRUMENTATION/ EQUIPMENT TO FACILITATE ITS USE AND OPERATION?	**(D)** **Y N N/A**

DISCUSSION

The ASCLD *Guidelines for Forensic Laboratory Management Practices,* available at www.ascld.org/labmgtguide.pdf, identify many important responsibilities of the crime laboratory director. One key responsibility relates to providing an adequate and safe working environment. The laboratory's physical plant should reflect due consideration of space, design, security, health and safety. If each of these

factors is properly planned and set in place, the laboratory's mission is enhanced and the responsibility of the director is met.

Although there are many acceptable means to determine how much space is recommended to provide an adequate and safe work environment in a forensic laboratory, one valuable reference is *Forensic Laboratories: Handbook for Facility Planning, Design, Construction, and Moving*. Publication NCJ168106 was prepared by the U.S. Department of Justice, Office of Justice Program, National Institute of Justice, and is available at www.ncjrs.org/pdffiles/168106.pdf. Laboratories in which usable space falls below adequate levels may experience health and safety problems, compromised efficiency, adversely effected morale and productivity, and increased risk of mishandled or contaminated evidence. In designing and planning additional space or a new facility, future space requirements should be projected. Average annual staff changes in each category should be factored in for the duration of the useful life the facility is projected to serve. The design should maximize laboratory functions and activities, safeguard the physical evidence, protect the confidential nature of the laboratory operation, and provide a safe and healthy working environment. Design considerations should permit the efficient flow of evidence from the time of its acceptance until its proper disposal. The functional areas of the laboratory should be relatively located in order to facilitate the use of common equipment and instruments. Adequate storage space for all supplies should be present and utilities should be sufficient for personnel to carry out assigned tasks in a safe manner (3.1.1 to 3.1.6).

3.2 DESIGN

PRINCIPLE

The laboratory should be designed to optimize its functions and activities, to safeguard the physical evidence and to protect the confidential nature of the laboratory operation. It should also provide a safe and healthy working environment.

STANDARDS AND CRITERIA

The physical design should permit the efficient flow of evidence from the time of its acceptance until its proper disposal.

3.2.1	DOES THE PHYSICAL DESIGN PERMIT THE EFFICIENT FLOW OF EVIDENCE FROM THE TIME OF ITS ACCEPTANCE UNTIL ITS PROPER DISPOSAL?	**(I)** **Y N N/A**

The relative locations of functional areas should facilitate the use of equipment and instruments.

3.2.2	DO THE RELATIVE LOCATIONS OF FUNCTIONAL AREAS FACILITATE THE USE OF EQUIPMENT AND INSTRUMENTS?	**(D)** **Y N N/A**

Adequate and proper lighting should be available for personnel to carry out assigned tasks.

3.2.3	IS THERE ADEQUATE AND PROPER LIGHTING AVAILABLE FOR PERSONNEL TO CARRY OUT ASSIGNED TASKS?	**(I)** **Y N N/A**

Adequate and proper plumbing and wiring should be available and accessible to carry out assigned tasks.

3.2.4	IS THERE ADEQUATE AND PROPER PLUMBING AND WIRING AVAILABLE AND ACCESSIBLE TO CARRY OUT ASSIGNED TASKS?	**(I)** **Y N N/A**

The laboratory should have proper general ventilation.

3.2.5	DOES THE LABORATORY HAVE PROPER GENERAL VENTILATION?	**(I)** **Y N N/A**

There should be adequate heating, cooling and humidity control in the laboratory.

3.2.6	IS THE HEATING, COOLING AND HUMIDITY CONTROL IN THE LABORATORY ADEQUATE?	**(I)** **Y N N/A**

DISCUSSION

Because the normal environment of a forensic science laboratory presents many chemical and biological hazards, proper ventilation and storage are critical, along with adequate heating, cooling and humidity. Lack of space and/or fiscal resources are not acceptable reasons for unacceptable laboratory practices (3.2.1 to 3.2.6).

3.3 SECURITY

PRINCIPLE

It is essential to ensure the proper safekeeping of physical evidence and records which are in the possession of the laboratory.

STANDARDS AND CRITERIA

Access to the operational area of the laboratory must be controllable and limited to those individuals who are assigned to routinely work in the area or to those individuals designated by the laboratory director to have access.

3.3.1	IS ACCESS TO THE OPERATIONAL AREA OF THE LABORATORY CONTROLLABLE AND LIMITED?	**(E)** **Y N N/A**

All exterior entrance/exit points require adequate security control.

3.3.2	DO ALL EXTERIOR ENTRANCE/EXIT POINTS HAVE ADEQUATE SECURITY CONTROL?	**(E)** **Y N N/A**

Internal areas requiring limited/controlled access must have a lock system.

3.3.3	DO ALL INTERNAL AREAS REQUIRING LIMITED/CONTROLLED ACCESS HAVE A LOCK SYSTEM?	**(E)** **Y N N/A**

Accountability of all keys, magnetic cards, etc., must be documented and their distribution limited to those individuals designated by the laboratory director to have access.

3.3.4	IS DISTRIBUTION OF ALL KEYS, MAGNETIC CARDS, ETC., DOCUMENTED AND IS DISTRIBUTION LIMITED TO THOSE INDIVIDUALS DESIGNATED BY THE LABORATORY DIRECTOR TO HAVE ACCESS?	**(E)** **Y N N/A**

The laboratory must be monitored during vacant hours by an intrusion alarm or by security personnel.

3.3.5	IS THE LABORATORY SECURED DURING VACANT HOURS BY MEANS OF AN INTRUSION ALARM OR BY SECURITY PERSONNEL?	**(E)** **Y N N/A**

The laboratory should have a fire detection system.

3.3.6	DOES THE LABORATORY HAVE A FIRE DETECTION SYSTEM?	**(I)** **Y N N/A**

DISCUSSION

Facility design, procedures, equipment and personnel must ensure the proper safekeeping of physical evidence and records. The laboratory's security system must control access and limit entry to operational areas. Visitors should not have unrestricted access to the operational areas of the laboratory. At a minimum, all exterior doorways to the laboratory facility must be controlled in order to prevent access by unauthorized personnel. All security doors must have keys or other access devices limited to authorized personnel. Each access device must be accounted for by a written register system. Besides exterior door control, the entire exterior perimeter of a forensic science laboratory must inhibit unauthorized access. For example, suspended ceilings which permit undetected entry to the laboratory are unacceptable.

Many forensic laboratories exist within a host agency facility. This may require written procedures to permit entry during off hours for emergencies. Such arrangements are acceptable if they include, for example, the breaking of a storage seal to access a key, code, etc., and notifying an authorized laboratory person. A written record system should document each emergency access to the laboratory. Many other control systems, which include key cards, surveillance cameras and intrusion alarms, are acceptable when they complement the laboratory's security system by controlling unauthorized access and/or limiting authorized access to the operational laboratory and evidence storage areas. The security of a forensic laboratory should be monitored during vacant hours by intrusion alarms and/or security personnel.

Short-term and long-term evidence storage areas require limited/controlled access. Such access must involve a lock system and laboratory procedures which protect evidence from loss, cross transfer, contamination or other deleterious changes. It is important that access to each evidence storage area be limited to authorized personnel (3.3.1 to 3.3.6).

3.4 HEALTH AND SAFETY

PRINCIPLE

It is important that a forensic science laboratory establish and maintain a health and safety program that is designed to safeguard employees from service-related injury and health problems.

STANDARDS AND CRITERIA

All elements of a laboratory's health and safety program must be clearly documented in a manual. The program should be monitored and the manual kept current by a health and safety manager.

3.4.1	DOES THE LABORATORY HAVE AN EFFECTIVE HEALTH AND SAFETY PROGRAM DOCUMENTED IN A MANUAL?	**(I) Y N N/A**
3.4.2	IS AN INDIVIDUAL DESIGNATED AS THE HEALTH AND SAFETY MANAGER?	**(I) Y N N/A**
3.4.3	IS THE HEALTH AND SAFETY PROGRAM MONITORED REGULARLY AND REVIEWED ANNUALLY TO ENSURE THAT ITS REQUIREMENTS ARE BEING MET?	**(I) Y N N/A**

The laboratory should have available and encourage the use of safety devices (particularly those required in its health and safety manual). Examples of such devices are goggles, face protectors, ear protectors, gloves and fire extinguishers.

3.4.4	DOES THE LABORATORY HAVE AVAILABLE AND ENCOURAGE THE USE OF SAFETY DEVICES, PARTICULARLY THOSE REQUIRED BY ITS HEALTH AND SAFETY MANUAL?	**(I) Y N N/A**

Proper equipment and material should be available for the handling of carcinogenic, toxic and/or other dangerous material spills.

3.4.5	DOES THE LABORATORY HAVE PROPER EQUIPMENT AND MATERIAL AVAILABLE FOR THE HANDLING OF CARCINOGENIC, TOXIC AND/OR OTHER DANGEROUS MATERIAL SPILLS?	**(I) Y N N/A**

The laboratory should have safety shower and eye wash equipment in appropriate locations and in good working condition.

3.4.6	DOES THE LABORATORY HAVE SAFETY SHOWER AND EYE WASH EQUIPMENT IN APPROPRIATE LOCATIONS AND IN GOOD WORKING CONDITION?	**(I) Y N N/A**

Exhaust hoods must be available to maintain a safe work environment.

3.4.7	ARE SUFFICIENT EXHAUST HOODS AVAILABLE TO MAINTAIN A SAFE WORK ENVIRONMENT?	**(I) Y N N/A**

Sufficient first-aid kits should be available and strategically located.

3.4.8	ARE SUFFICIENT FIRST-AID KITS AVAILABLE AND STRATEGICALLY LOCATED?	**(I) Y N N/A**

An adequate number of personnel should hold current certification in first-aid.

3.4.9	DOES THE LABORATORY HAVE AN ADEQUATE NUMBER OF PERSONNEL HOLDING CURRENT CERTIFICATION IN FIRST-AID?	**(I)** **Y N N/A**

Space should be provided for safe storage of volatile, flammable, explosive and other hazardous materials.

3.4.10	IS APPROPRIATE SPACE PROVIDED FOR SAFE STORAGE OF VOLATILE, FLAMMABLE, EXPLOSIVE AND OTHER HAZARDOUS MATERIALS?	**(I)** **Y N N/A**

Emergency exits from the laboratory should be in compliance with safe working requirements.

3.4.11	ARE THE EMERGENCY EXITS FROM THE LABORATORY ADEQUATE FOR SAFE EXIT IN AN EMERGENCY?	**(I)** **Y N N/A**

General cleanliness and good-housekeeping should be apparent.

3.4.12	IS THERE GENERAL CLEANLINESS AND APPARENT GOOD-HOUSEKEEPING IN THE LABORATORY?	**(D)** **Y N N/A**

DISCUSSION

Health and safety are everyone's responsibility and require the commitment of each employee to be effective. Management's commitment is essential for long term success of a health and safety program. Such a cooperative relationship will safeguard the employees of a forensic laboratory as well as address management's responsibility and liability.

Management's commitment should be demonstrated by a safety manual (3.4.1) outlining procedures and resources and by the appointment of a safety manager (3.4.2). A laboratory safety manual should include, as a minimum, a policy statement, the formation of a safety committee, assignment of responsibilities, physical plant safety requirements, operational safety requirements, program monitoring requirements, and compliance with applicable regulatory programs external to the laboratory. An annual safety audit of the laboratory will assess the program's effectiveness (3.4.3).

Basic safety equipment that is important in a laboratory include safety showers, eye washes, lab coats, safety glasses, first aid kits, sufficient materials for dangerous material spills and sufficient hoods to effectively maintain a safe work environment (3.4.4 to 3.4.8). A safety training program should cover first aid procedures, safety equipment and procedures and emergency drills such as fire and natural disasters. Such training should be documented and certification kept current (3.4.9).

Facility space and design features should provide for safe storage of volatile, flammable, explosives and other hazardous materials (3.4.10).

GLOSSARY

accountability	The quality of subordinate workers being responsible for their own work and answerable to a superior.
administrative documentation	Records such as case related conversations, evidence receipts, description of evidence packaging and seals, and other pertinent information.
administrative review	A procedure used to check for consistency with laboratory policy and for editorial correctness.
approved test provider	A proficiency test provider who has complied with the test manufacturing guidelines established by the Proficiency Review Committees.
audit	A review conducted to compare the various aspects of the laboratory's performance with a standard for that performance.
biology (discipline)	The identification and comparison of genetic markers from biological fluids; sub-disciplines include DNA and serology. (Screening and stain identification are considered a fundamental part of the discipline.
blind sample	A proficiency test sample for which the analyst is unaware of the test nature of the sample at the time of analysis.
case record	Files containing administrative and examination documentation generated or received by a laboratory pertaining to a particular case.
competency test	The evaluation of a person's ability to perform work in any functional area prior to the performance of independent casework.
computer forensics	The application of science and engineering to the legal problem of digital evidence.
computer systems	A complete, working computer to include any software and peripheral devices.
control sample	A standard of comparison for verifying or checking the finding of an experiment.
controlled substances (discipline)	The identification of controlled drug substances either in pure, legal or illicit dosage forms.
controlling	Establishing standards of performance, measuring current performance in relation to established standards, and taking corrective action as required.

controls	Tests performed in parallel with experimental samples and designed to demonstrate that a procedure worked correctly.
crime/forensic laboratory	A laboratory (with at least one full-time scientist) which examines physical evidence in criminal matters and provides opinion testimony with respect to such physical evidence in a court of law.
crime scene	An area, object or person, external to a laboratory facility, from which evidence is identified, documented, collected, and/or interpreted.
crime scene (discipline)	The identification, documentation, collection, and or interpretation of material at a location external to a laboratory facility. Scene reconstruction is also part of this discipline.
crime scene documentation (see notes) (see examination documentation)	May include notes and/or examination documentation, photographs, video, sketches, and other documents (including electronic versions) which are used to record and support the actions and/or conclusions of an examiner.
crime scene reconstruction	The process of determining the nature of events that occurred at a scene from an evaluation of physical evidence and other relevant information.
crime scene security and integrity	The actions necessary to : • Control access to a scene; • Establish and maintain a record of custody and control for a scene and all items collected from a scene; and • Protect against loss, cross contamination, or deleterious change of evidence or potential evidence within a scene.
criteria file	An electronic or hard copy file, in numerical sequence, containing responses, which document compliance or non-applicability for each criterion in the accreditation manual. Responses may be in the form of statements; pictures; or excerpts from or references to components of other documents
criterion(a)	Objective test(s) to evaluate whether the laboratory activity meets the standard. This is often a restatement of the standard in the form of a question which can be answered (yes), (no) or (n/a).
critical reagent	Reagents such as commercial supplies and kits which have an expiration date. See reagent.
deficiency	An inadequacy; lacking in some necessary quality or element. Deficiencies include missing data, incomplete data, or incomplete reports.

desirable (standard)	Standards which have the least affect on the work product or the integrity of the evidence but which nevertheless enhance the professionalism of the laboratory.
diagonal lines of communication	Communication between subordinate personnel in one unit and supervisory personnel in another unit.
digital evidence	Information of probative value stored or transmitted in binary form.
digital video/image/audio	The capture, processing, analysis, and storage of audio, video, or still images in digital format.
directing	The process of motivating, leading, guiding, stimulating, and activating people.
director	The highest ranking manager within an individual laboratory.
discipline	A major area of casework for which a laboratory may seek accreditation.
discussion	Information setting forth the rationale used in the adoption of the standards and providing more detailed information of some criteria.
DNA	Deoxyribonucleic acid; a sub-discipline of biology, which identifies and compares DNA in biological samples.
duty	A responsibility, task, etc., required by or relating to one's occupation or position.
essential (standard)	Standards which directly affect and have fundamental impact on the work product of the laboratory or the integrity of the evidence.
evidence identification (crime scene discipline)	The process of assessing material at a scene for the purpose of determining the value or potential value of that material as evidence of a crime.
examination documentation (see notes)	Includes reference to procedures followed, test conducted, standards and controls used, diagrams, printouts, audioradiograms, photographs, observations and results of examinations.
exemplar	See "known" sample.
external proficiency testing program	A test program managed and/or controlled independent of the laboratory system.
firearms/toolmarks (discipline)	Examination and comparison of evidence resulting from discharge and/or use of firearms; comparison of marks made by various tools.

goal	A statement of purpose defining the mission of an organization.
important (standard)	Standards which are considered to be key indicators of the overall quality of the laboratory, but may not directly affect the work product nor the integrity of the evidence.
inconsistency	Any reported results which differ from the consensus results. Inconsistencies may be classified as administrative, systemic, analytical or interpretive.
interlineations	Words, numbers or other text which is added between the lines of previously written documentation.
internal proficiency testing program	Proficiency testing program managed and controlled within the laboratory system.
known sample technique	A quality assurance procedure in which a previously identified substance is submitted to a laboratory for examination to determine the reliability of the laboratory's procedures.
known sample	A specimen of an identified source acquired for the purpose of comparison with an evidence sample; synonymous with exemplar.
laboratory branch	An independently managed member of a laboratory system.
laboratory satellite	A member of a laboratory system which is managed by, but is physically separated from, a parent laboratory.
laboratory system	An organization containing at least two physically separate laboratory facilities which are independently managed under the control of a single superior in the chain of command.
latent prints (discipline)	Development and comparison of latent print impressions. (Development alone is not considered a discipline).
limited access	Access limited to personnel authorized by the laboratory director.
manager	A person with the responsibility for directing and controlling an organizational unit or program.
media	Objects on which data can be stored.
method	The course of action or technique followed in conducting a specific analysis or comparison leading to an analytical result.
must	The word designates a requirement which is not optional.
natural science	Chemistry, biology and physics.

notes (see examination documentation)	The documentation of procedures, standards, controls and instruments used, observations made, results of tests performed, charts, graphs, photos, and other documents generated which are used to support the examiner's conclusions.
objective	A measurable, definable accomplishment which furthers the goals of the organization.
open proficiency testing program	A quality assurance program where the examiner is aware that the sample is a test.
organizing	The process of identifying, specifying and assigning work, grouping work and resources into a structure and establishing a chain of command between individuals and groups.
planning	The analysis of relevant information from the present and the past and the assessment of probable future developments so that a course of action (plan) may be determined that enables the organization to meet its stated objectives.
policy	A guiding principle, operating practice, or plan of action governing decisions made on behalf of an organization.
pre-distribution testing	Testing done by a laboratory on a proficiency test provided by an approved test provider prior to distribution. A pre-distribution testing laboratory will be considered to have completed a proficiency test, provided the manufacturer's expected conclusions were unknown to the laboratory at the time of the testing.
principle	A basic rule, assumption or quality; a fixed or predetermined policy or mode of action.
probation	A laboratory which is on probation remains accredited but is under surveillance for a designated period of time during which it must meet specified requirements as designated by the Board.
procedure	The manner in which an operation is performed; a set of directions for performing an examination or analysis -- the actual parameters of the methods employed.
Proficiency Review Committee (PRC)	A committee appointed by the Board of ASCLD/LAB, whose role is to evaluate the performance of accredited laboratories in proficiency tests.

proficiency tests	Tests to evaluate the competence of analysts, technical support personnel and the quality performance of a laboratory; in open tests, the analysts and technical support personnel are aware that they are being tested; in blind tests, they are not aware. Internal proficiency tests are conducted by the laboratory itself; external proficiency tests are conducted by an agency independent of the laboratory being tested.
protocol	A directive listing the procedures to be followed in performing a particular laboratory examination or operation; the overall plan for analysis of a particular type of evidence.
quality assurance	Those planned and systematic actions necessary to provide sufficient confidence that a laboratory's product or service will satisfy given requirements for quality.
quality audit	A management tool used to evaluate and confirm activities related to quality. Its primary purpose is to verify compliance with the operational requirements of the quality system.
quality control	Internal activities, or activities conducted according to externally established standards, used to monitor the quality of analytical data and to ensure that it satisfies specified criteria.
quality manager (however titled)	An individual designated by top management who, irrespective of other responsibilities, has the defined authority and obligation to ensure that the requirements of the quality system are implemented and maintained.
quality manual	A document stating the quality policy an describing the various elements of the quality system and quality practices of an organization. It will also reference and note the location of additional material relating to the laboratory's quality arrangement.
quality system	The organizational structure, responsibilities, procedures, processes, and resources for implementing quality management; includes all activities which contribute to quality, directly or indirectly.
questioned document (discipline)	Examination of printed, typed or written material for the purpose of identifying the source, determining alternations or other means of gaining information about the item or the circumstances surrounding its production.
questioned sample	An evidence sample to be examined for the purpose of comparison or identification.
reagent	A substance used because of its chemical or biological activity.

re-examination technique	A quality assurance technique whereby a previously examined sample is re-examined by a different person.
reference standard	A sample acquired or prepared that has known properties (e.g., concentration, chemical composition) for the purpose of calibrating equipment and/or for use as a control in experiments.
reliability	Processing the quality of being dependable; may refer to personnel, materials, and equipment.
revocation	The loss of accreditation by action of the Board and/or the Delegate Assembly.
rule	An authoritative direction for conduct or procedure.
safety manager	An individual (however titled) designated by top management who, irrespective of other responsibilities, has the defined authority and obligation to ensure that the requirements of the safety system are implemented and maintained.
safety manual	A document stating the safety policy and describing the various elements of the safety system of an organization.
scientist	A person who employs scientific methods in the examination of evidence in a forensic laboratory.
serology	A sub-discipline of biology, which identifies and compares genetic markers other than DNA, in biological samples.
should	The word implies a strong recommendation.
standard	A statement which describes an acceptable level of performance, excellence, or attainment in that particular activity.
standard sample	See reference standard.
sub-discipline	A specific type of analysis within an accredited discipline; (subdisciplines include but are not necessarily limited to: arson, hair, fibers, glass, paint, explosives and gunshot residue in trace evidence; serology and DNA in biology; firearms and toolmarks in firearms/toolmarks; alcohol and drugs in toxicology; and footwear/tiretrack evidence in the discipline to which it is assigned).
supervisor	A person directly responsible for overseeing the work in an organizational unit.

suspension	A laboratory which is suspended has its accreditation revoked for a designated period of time during which it must comply with requirements designated by the Board in order to have its accreditation restored.
technical review	Review of notes, data and other documents which form the basis for a scientific conclusion.
technical support personnel	A person who performs casework related duties on items of evidence within the laboratory.
toxicology (discipline)	Analysis of biological samples for the presence of drugs and other potentially toxic materials. (Analysis for alcohol in blood, breath, or urine may be included in this discipline if it is the only toxicological analysis performed by the laboratory.
trace evidence (discipline)	Any analytical procedure utilizing either chemical or instrumental techniques not specifically covered in other disciplines; including, but not limited to fire debris, explosives, paint, glass, hair, fibers and other varieties of trace evidence.
validation	The process of performing a set of experiments which establish the efficacy and reliability of a technique or procedure or modification thereof.

INSTRUCTIONS FOR COMPLETION OF ASCLD/LAB APPLICATION FOR ACCREDITATION (Appendix 1)

A laboratory must submit a completed Application for Accreditation form with all required accompanying documentation to ASCLD/LAB to initiate the accreditation process. The completed application form and accompanying documentation must be submitted in a ring binder with labeled tabs which designate the location of the required documentation or in an organized electronic format using software which is approved by the ASCLD/LAB office. For laboratory systems, each laboratory must complete a separate application. When applications are submitted for multiple laboratories within a system, procedure documents which are used by all laboratories within the system need not be duplicated for each laboratory.

Laboratories applying for accreditation for the first time must submit an application fee with the application. The amount of the application fee is based on the size of the applicant laboratory. The amount of the application fee may be determined from a schedule on the ASCLD/LAB homepage at www.ascld-lab.org. Laboratories which require other arrangements for payment of an application fee should contact the Executive Director for arrangements. Laboratories seeking to renew accreditation are not required to submit an application fee.

The Application for Accreditation form (Appendix 1) is available in an interactive format at www.ascld-lab.org under the forms tab. All blanks on Appendix 1 must be completed as follows:

1. The complete name of the parent organization for the applicant laboratory.

2. The complete name of the applicant laboratory. The name provided should be the name to be used on an accreditation certificate.

3. The requested information for the individual designated as the Laboratory Director.

4. Complete only if someone other than the laboratory director will coordinate the day-to-day inspection process with the inspection team captain.

5. Check only the blank(s) which apply to the type of laboratory organization.

6. Check each of the disciplines in which the applicant laboratory performs casework, even if the laboratory performs examinations in a limited number of cases. Laboratories must apply for accreditation in all disciplines in which the laboratory performs work. The crime scene discipline is the only exception. A laboratory may elect to not apply for accreditation in crime scene by not checking the blank beside the discipline.

   If a laboratory's work in a discipline is limited to one or two subdisciplines, this should be indicated in the space provided by a statement such as "toxicology work is limited to blood alcohol analysis only" or "trace evidence examinations are limited to paint and fibers only."

7. Indicate the number of laboratory positions, even if vacant, designated as testifying and non-testifying.

8. List all current personnel who have performed casework examinations during the past year, or who are in training to perform casework, on Appendix 1a. Beside the name of each individual, please check the appropriate discipline blank for the disciplines in which casework has been performed within the past year and the disciplines in which the individual is training to perform casework. This listing should include all individuals who conduct any portion of evidence examination, even if in the capacity of technical support. Appendix 1a is available in an interactive format at www.ascld-lab.org.

   Complete Appendix 1b by listing all individuals who do not perform any portion of the evidence examination. Individuals listed would include those who are in clerical, administrative or managerial positions. Individuals whose duties are limited to evidence receipt, custody and distribution would also be listed on this form. Appendix 1b is available in an interactive format at www.ascld-lab.org.

   Appendices 1a and 1b may be submitted on a CD.

9. Complete a Statement of Qualifications form (Appendix 2) for each individual listed on Appendix 1a. Appendix 2 is available in an interactive format at www.ascld-lab.org. Laboratories which choose to create their own Statement of Qualifications form must follow the same format as Appendix 2. The Statement of Qualifications forms may be submitted on a CD.

10. Each of the itemized documents must be included as attachments to the application. When available, these documents may be submitted on a CD. All documents must be clearly identified. If some documents such as a laboratory budget do not exist, a statement to this effect must be made. A line item for the laboratory in an organizational budget or a system budget may be all that exists. If so please include a copy of this document.

11. An audit of the laboratory using the standards and criteria of the current version of the accreditation manual is a required part of the preparation of the Application for Accreditation. The Grade Computation Sheets (Appendix 3) must be completed as documentation of the audit. Each criterion on the Grade Computation Sheets must be scored as YES, NO or N/A and the summation of criteria ratings at the end of the form must be completed. Appendix 3 is available in an interactive format at www.ascld-lab.org. With Adobe Approval software, the form may be saved electronically. A link for acquiring Adobe Approval is available at www.ascld-lab.org.

In addition to the documentation required with the Application for Accreditation, an applicant laboratory is required to prepare a Criteria File for use by the inspection team. The Criteria File may be prepared in hard copy form or in electronic format. If a laboratory elects to prepare the Criteria File electronically, a format document is available at www.ascld-lab.org. Inclusion of an electronic copy of the Criteria File with the application will prove extremely valuable in expediting the inspection process.

The original hard copy of the completed application (Appendix 1) must be signed by the applicant laboratory director and submitted to ASCLD/LAB with all required documents in either hard copy or electronic form. Software used to create application documents and criteria files must be approved by the ASCLD/LAB office.

AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS
LABORATORY ACCREDITATION BOARD (ASCLD/LAB)

APPLICATION FOR ACCREDITATION

Please provide the following information and return with the requested documentation to the ASCLD/LAB Executive Director, 139 J Technology Drive, Garner, NC 27529. All information must be placed in a ring binder with labeled tabs which designate the location of the required documentation or in an organized electronic format using software which is approved by the ASCLD/LAB office. Additional copies will be sent by the Applicant Laboratory to Inspectors after coordination with the Team Captain.

1. Organization Name _____

2. Name of the laboratory _____

_____

3. Laboratory Director _____ Title _____

Address _____

City _____ State _____ Country _____ Postal Code _____

Telephone( ) _____ Fax( ) _____ E-mail _____

4. If someone other than the laboratory director is the contact:

Name _____ Title _____

Telephone( ) _____ Fax( ) _____ E-mail _____

5. The Laboratory is: _____

___ Governmental (Fed ___ State ___ County ___ City ___ Regional ___ Private ___)

___ Private (not for profit) ___ Proprietary (privately owned)

6. Specific disciplines in which accreditation is sought:

___ Controlled Substances	___ Toxicology
___ Trace Evidence	___ Firearms/Toolmarks
___ Biology	___ Latent Prints
___ Questioned Documents	___ Crime Scene (Optional)
___ Digital Evidence	

If service is limited in any discipline, please list the sub-disciplines: _____

_____

_____

7. Total positions in laboratory including vacancies:
Testifying _____ Non-Testifying _____

8. List all personnel by completing the following tables, "Professional Staff Testifying" and "Other Personnel". Use additional sheets if necessary. (Computerized printouts of similar format are acceptable. The form may be downloaded at www.ascld-lab.org)

9. Submit a current Statement of Qualifications form for each person other than clerical staff (Appendix 2).

10. Provide a copy of:

- table of organization covering all positions
- labeled, dimensional floor plan of the laboratory
- the laboratory objectives
- the laboratory budget
- the laboratory quality manual or manuals
- a job description for each job category in the laboratory
- procedures for handling and preserving evidence
- procedures on case records
- security procedures
- a list of the management training courses/seminars taken by the manager(s)
- other documents of director's choice such as monthly or annual reports which give laboratory work statistics.

13. Submit a copy of Grade Computation Sheets (Appendix 3) completed through self-evaluation.

As the Director of the applicant laboratory, I have verified that all required information and documentation for application is included with this application and that all statements made on this application are correct to the best of my knowledge and belief. I have reviewed the conditions for accreditation as outlined in the Accreditation Manual and agree to all of the stated conditions. I understand that ASCLD/LAB has the right to return my application without taking action, if it is not properly completed or does not contain the required documentation. I also understand that ASCLD/LAB is not required to accredit any laboratory unless it is determined that an applicant laboratory has met all standards and criteria required for accreditation.

Director's Signature _____ Date _____

PROFESSIONAL STAFF TESTIFYING (INCLUDING TRAINEES)

NAME/JOB TITLE	CS	TOX	TRA	BIO	F/T	QD	LP	CrSc	DE

OTHER PERSONNEL (MANAGERS, CLERICAL, TECHNICAL SUPPORT, ETC.)

NAME	JOB TITLE

STATEMENT OF QUALIFICATIONS

(Use additional sheets if necessary)

Name of Lab_____ **Date** _____

Name _____ **Job Title** _____

Discipline(s): Indicate all areas in which you do casework.

___ controlled substances
___ firearms/toolmarks
___ trace evidence
___ latent prints
___ digital evidence
___ toxicology
___ biology
___ questioned documents
___ crime scene

Please list all subdisciplines in which you perform casework:

_____

_____

Education: List all higher academic institutions attended.

Institution	Dates attended	Major	Degree completed

Other Training: List continuing education, workshops, in-service and other formal training received.

_____

_____

_____

_____

Courtroom Experience: List the discipline(s) in which you have qualified to testify as an expert witness and indicate over what period of time and approximately how many times you have testified in each.

_____

_____

_____

Professional Affiliations: List any professional organizations of which you are or have been a member. Indicate any offices or other positions held and the date(s) of these activities.

_____

_____

_____

Employment History: List all scientific or technical positions held, particularly those related to forensic science. List current position first. Give a brief summary of principal duties and tenure in each position.

(1) Job Title_____Employer_____

Principal Duties:_____

_____

_____

_____Tenure:_____

(2) Job Title_____Employer_____

Principal Duties:_____

_____

_____

_____Tenure:_____

(3) Job Title_____Employer_____

Principal Duties:_____

_____

_____

_____Tenure:_____

(4) Job Title_____Employer_____

Principal Duties:_____

_____

_____

_____Tenure:_____

Other Qualifications: List below any scientific publication and/or presentation you have authored or co-authored, research in which you are or have been involved, academic or other teaching positions you have held, and any other information which you consider relevant to your qualification as a forensic scientist. (Use additional sheets if necessary.)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

GRADE COMPUTATION SHEETS

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
1.1.1.1 (I)				___	___	___			
1.1.1.2 (I)				___	___	___			
1.1.1.3 (D)							___	___	___
1.1.2.1 (I)				___	___	___			
1.1.2.2 (I)				___	___	___			
1.1.2.3 (E)	___	___	___						
1.1.2.4 (E)	___	___	___						
1.1.2.5 (E)	___	___	___						
1.1.2.6 (D)							___	___	___
1.1.2.7 (E)	___	___	___						
1.1.2.8 (D)							___	___	___
1.1.2.9 (I)				___	___	___			
1.1.2.10 (I)				___	___	___			
1.1.2.11 (D)							___	___	___
1.1.2.12 (D)							___	___	___
1.1.2.13 (D)							___	___	___
1.1.2.14 (I)				___	___	___			
1.2.1.1 (D)							___	___	___
1.2.1.2 (D)							___	___	___
E/I/D = 4/7/8									
TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
1.2.2.1 (I)				___	___	___			
1.2.2.2 (I)				___	___	___			
1.2.2.3 (I)				___	___	___			
1.2.2.4 (I)				___	___	___			
1.2.2.5 (I)				___	___	___			
1.2.2.6 (I)				___	___	___			
1.3.1.1 (D)							___	___	___
1.3.1.2 (I)				___	___	___			
1.3.1.3 (D)							___	___	___
1.3.2.1 (D)							___	___	___
1.3.2.2 (D)							___	___	___
1.3.2.3 (D)							___	___	___
1.3.3.1 (E)	___	___	___						
1.3.3.2 (I)				___	___	___			
1.3.3.3 (I)				___	___	___			
1.3.3.4 (I)				___	___	___			
1.4.1.1 (E)	___	___	___						
1.4.1.2 (E)	___	___	___						
1.4.1.3 (E)	___	___	___						
1.4.1.4 (E)	___	___	___						
1.4.1.5 (E)	___	___	___						
1.4.2.1 (E)	___	___	___						
E/I/D = 7/10/5									
TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
1.4.2.2 (E)	___	___	___						
1.4.2.3 (E)	___	___	___						
1.4.2.4 (E)	___	___	___						
1.4.2.5 (E)	___	___	___						
1.4.2.6 (E)	___	___	___						
1.4.2.7 (E)	___	___	___						
1.4.2.8 (E)	___	___	___						
1.4.2.9 (E)	___	___	___						
1.4.2.10 (E)	___	___	___						
1.4.2.11 (I)				___	___	___			
1.4.2.12 (I)				___	___	___			
1.4.2.13 (E)	___	___	___						
1.4.2.14 (E)	___	___	___						
1.4.2.15 (E)	___	___	___						
1.4.2.16 (E)	___	___	___						
1.4.2.17 (E)	___	___	___						
1.4.2.18 (E)	___	___	___						
1.4.2.19 (E)	___	___	___						
1.4.3.1 (E)	___	___	___						
1.4.3.2 (E)	___	___	___						
1.4.3.3 (I)				___	___	___			
1.4.3.4 (I)				___	___	___			
E/I/D = 18/4/0									
TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
2.1.1 (I)				___	___	___			
2.1.2 (D)							___	___	___
2.1.3 (D)							___	___	___
2.1.4 (D)							___	___	___
2.2.1 (E)	___	___	___						
2.2.2 (E)	___	___	___						
2.2.3 (E)	___	___	___						
2.2.4 (E)	___	___	___						
2.3.1 (E)	___	___	___						
2.3.2 (E)	___	___	___						
2.3.3 (E)	___	___	___						
2.3.4 (E)	___	___	___						
2.4.1 (E)	___	___	___						
2.4.2 (E)	___	___	___						
2.4.3 (E)	___	___	___						
2.4.4 (E)	___	___	___						
2.5.1 (E)	___	___	___						
2.5.2 (E)	___	___	___						
2.5.3 (E)	___	___	___						
2.5.4 (E)	___	___	___						
2.5.5 (E)	___	___	___						
2.5.6 (E)	___	___	___						
E/I/D = 18/1/3									
TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
2.6.1 (I)				___	___	___			
2.6.2 (E)	___	___	___						
2.6.3 (E)	___	___	___						
2.6.4 (E)	___	___	___						
2.6.5 (E)	___	___	___						
2.7.1 (I)				___	___	___			
2.7.2 (E)	___	___	___						
2.7.3 (E)	___	___	___						
2.7.4 (E)	___	___	___						
2.7.5 (E)	___	___	___						
2.8.1 (I)				___	___	___			
2.8.2 (E)	___	___	___						
2.8.3 (E)	___	___	___						
2.8.4 (E)	___	___	___						
2.8.5 (E)	___	___	___						
2.9.1 (E)	___	___	___						
2.9.2 (E)	___	___	___						
2.9.3 (E)	___	___	___						
2.9.4 (E)	___	___	___						
2.9.5 (E)	___	___	___						
2.10.1 (E)	___	___	___						
E/I/D = 18/3/0									
TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
2.10.2 (E)	___	___	___						
2.10.3 (E)	___	___	___						
2.10.4 (E)	___	___	___						
2.10.5 (E)	___	___	___						
2.11.1 (I)				___	___	___			
2.11.2 (E)	___	___	___						
2.11.3 (E)	___	___	___						
2.11.4 (E)	___	___	___						
2.11.5 (E)	___	___	___						
3.1.1 (I)				___	___	___			
3.1.2 (D)							___	___	___
3.1.3 (I)				___	___	___			
3.1.4 (I)				___	___	___			
3.1.5 (I)				___	___	___			
3.1.6 (D)							___	___	___
3.2.1 (I)				___	___	___			
3.2.2 (D)							___	___	___
3.2.3 (I)				___	___	___			
3.2.4 (I)				___	___	___			
3.2.5 (I)				___	___	___			
3.2.6 (I)				___	___	___			
3.3.1 (E)	___	___	___						
E/I/D = 9/10/3									
TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

CRITERIA	ESSENTIAL Y	ESSENTIAL N	ESSENTIAL N/A	IMPORTANT Y	IMPORTANT N	IMPORTANT N/A	DESIRABLE Y	DESIRABLE N	DESIRABLE N/A
3.3.2 (E)	___	___	___						
3.3.3 (E)	___	___	___						
3.3.4 (E)	___	___	___						
3.3.5 (E)	___	___	___						
3.3.6 (I)				___	___	___			
3.4.1 (I)				___	___	___			
3.4.2 (I)				___	___	___			
3.4.3 (I)				___	___	___			
3.4.4 (I)				___	___	___			
3.4.5 (I)				___	___	___			
3.4.6 (I)				___	___	___			
3.4.7 (I)				___	___	___			
3.4.8 (I)				___	___	___			
3.4.9 (I)				___	___	___			
3.4.10 (I)				___	___	___			
3.4.11 (I)				___	___	___			
3.4.12 (D)							___	___	___

E/I/D = 4/12/1

TOTALS	___	___	___	___	___	___	___	___	___

LABORATORY_____

SUMMATION OF CRITERIA RATINGS

	Total Possible	Total Yes	Total No	Total N/A	Total Number Yes/No
Essential	78				
Important	47				
Desirable	20				

Calculations

Percent Essential = $\frac{\text{Total Yes}}{\text{(Total Yes + Total No)}} \times 100 =$ _____

Percent Important = $\frac{\text{Total Yes}}{\text{(Total Yes + Total No)}} \times 100 =$ _____

Percent Desirable = $\frac{\text{Total Yes}}{\text{(Total Yes + Total No)}} \times 100 =$ _____

Standards

Essential	100%
Important	75%
Desirable	50%

NOTE: N/A answers will not be counted in above calculations, but each N/A answer must be explained in writing.

Inspection Team: .....

.....

.....

.....

.....

.....

Laboratory Director _____

Date _____

LABORATORY _____

On-Site Documentation Checklist

The following documents and records must be reviewed by the inspection team as a part of the inspection process. These documents and records are a reference to the location of the documents and records should made available in a conference room to be used by the inspection team.

Documents and Records	Conference Room	Other Location	Comments
A Copy of the Application for Accreditation Documents			
Training Program(s) for each Discipline			
Proficiency Testing Records for all Personnel			
Reagent Records			
Testimony Monitoring Records for all Personnel			
Analytical Standards Records			
Instrument/Equip. Maintenance & Calibration Records			
Key or Laboratory Access Records			
Annual Management Reviews of Quality System			
DNA Audit Documents			
Competency Testing Records			
Safety Manual			
Analytical Procedures			
Standard Operating Procedures			
Criteria File			
Five Case Records for Each Analyst in Each Discipline in which Casework is Performed			

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AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS
LABORATORY ACCREDITATION BOARD (ASCLD/LAB)

POST-INSPECTION EVALUATION

The quality of the accreditation program depends heavily upon feedback from participants in the accreditation process. It is important to constantly review the strengths and the weaknesses of the program and its processes in order to make necessary improvements. It is equally important that feedback be received from all laboratories concerning how the staff and volunteers who are involved in the process carry out their respective responsibilities and how they represent ASCLD/LAB. Please take a few minutes to provide honest and thoughtful feedback concerning how you and your laboratory perceived the application and inspection process. Please complete this form and forward it to: ASCLD/LAB Executive Director,139 J Technology Dr, Garner, NC 27529. This form is also available in an interactive format at www.ascld-lab.org.

Laboratory Name _____

Dates of Inspection _____

1. Does the accreditation manual provide sufficient information concerning what is expected of you and your laboratory during this process? Yes ___ No ___ If not, please explain what additional information is needed.

   _____
   _____
   _____

2. Was the communication from the ASCLD/LAB office and staff prior to the on-site inspection timely and sufficient to keep you and your laboratory informed about the process? Yes ___ No ___ If not, please indicate what was missing and how it can be improved.

   _____
   _____
   _____

3. Did the inspection team evaluate all areas of your laboratory, fairly and objectively and in accordance with the standards and criteria of the accreditation manual? Yes ___ No ___ If no, please explain.

   _____
   _____
   _____

4. Did all members of the inspection team conduct themselves in a professional manner? Were members of the inspection team clearly focused on the goals of the accreditation program? Yes ___ No ___ If no, please explain.

   _____
   _____
   _____

5. Was the visit of the inspection team with the organization's administration both informative and well received? Yes ___ No ___ If no, please explain.

_____
_____
_____

6. Did the Inspection Team Captain keep you well informed throughout the inspection? Yes ___ No ___ If no, please explain.

_____
_____
_____

7. Was the summation conference at the conclusion of the inspection informative and conducted in a professional manner? Yes ___ No ___ If no, please explain.

_____
_____
_____

8. Other comments and observations. Please use additional sheets of paper, as needed, for explanations and any additional comments or suggestions that might be helpful in improving the accreditation program.

_____
_____
_____
_____
_____
_____
_____
_____

_____
Laboratory Director Signature

AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS
LABORATORY ACCREDITATION BOARD (ASCLD/LAB)

ANNUAL ACCREDITATION AUDIT REPORT FOR 20___

(Indicate the calendar year of activity above. For example, the report submitted in 2004 should cover activities for calendar year 2003)

Accreditation Certificate Number (Submit a separate form for each certificate number): _____

Laboratory Name: _____

Agency Name: _____

LABORATORY DIRECTOR

Name: _____ Title: _____

Mailing Address: _____

City: _____ State/Province: _____ Zip/Postal Code: _____

Country: _____ Telephone: _____ Fax: _____

E-mail: _____

NAME of SYSTEM DIRECTOR (if applicable): _____

QUALITY MANAGER

Name: _____ Title: _____

Telephone: _____ Fax: _____

E-mail: _____

LABORATORY DELEGATE (Check one)

☐ The Laboratory Director listed above is the Delegate.
☐ As Laboratory Director, I have named the following individual as the Delegate for this laboratory:

Name: _____ Title: _____

Telephone: _____ Fax: _____

E-mail: _____

SELF-EVALUATION OF COMPLIANCE

Using standards and criteria in the most current Accreditation Manual, a self-evaluation of your laboratory operations should form the basis for completing the following table.

	Total Number Possible	Total Yes	Total No	Total N/A	Percentage Yes
Essential					
Important					
Desirable					

While the current manual should always be used for annual audits, laboratories which were accredited under the standards and criteria of an earlier version of the manual are not required to be in compliance with new standards which were added or raised to essential after their accreditation. However, laboratories must include a statement concerning such standards, which they do not meet, to indicate the steps that are being taken to move toward compliance with those standards and criteria. This report must include explanations of any essential criteria scored "No" during the self-evaluation.

PERSONNEL

Total number of employees subject to proficiency testing (including vacancies): _____

The total number of employees subject to proficiency testing (including vacancies) is an important number and should be accurately determined. This is the number used to calculate your laboratory's shares for the annual administrative fee. The number should not include administrative or clerical personnel. The number does include all laboratory positions subject to proficiency testing, whether in training, providing technical support or currently vacant.

IMPORTANT . . . If the response to any of the following is YES, please attach an explanation

- Did the annual audit reveal any instance of substantive non-compliance with any ***Essential*** criteria? ("Substantive" is defined below) . . . . . ☐ Yes ☐ No

The primary purpose of the *Annual Accreditation Audit Report* is to document that the laboratory has made at least an annual determination that operations continue to be in compliance with accreditation standards, with a particular focus on *Essential* criteria. Laboratories must report *substantive* occurrences of non-compliance with essential criteria. "Substantive" means potentially having a significant bearing on the quality of the work of the laboratory, even if for a short period of time.. With the expectation that a laboratory will always react internally and appropriately to instances of known non-compliance, it is not necessary to report every isolated occurrence of non-compliance. For deciding upon inclusion in this report, factors such as significance, substance and time-span of non-compliance should be evaluated. When in doubt, include the finding in your report.

During the past calendar year:

- Was any discipline or sub-discipline added, reinstated, or suspended? . . . . . ☐ Yes ☐ No
- Was there a significant organizational change(s)? . . . . . ☐ Yes ☐ No
- Did an inconsistency or error on a proficiency test or casework occur that required corrective action to be implemented? . . . . . ☐ Yes ☐ No
- Did the laboratory meet the external proficiency testing requirements of each discipline, including the submission of all test results by the test provider's deadline? . . . . ☐ Yes ☐ No

SIGNATURE (A typed name should be inserted for reports submitted via E-mail)

Laboratory Director _____ Date _____

INSTRUCTIONS

- This report should cover the period January 1 through December 31 of the past year
- Reports may be submitted electronically to tdolin@ascld-lab.org or mailed to: ASCLD/LAB, 139 J Technology Drive, Garner, North Carolina 27529
- Questions about the completion of the *Annual Accreditation Audit Report* may be addressed to ASCLD/LAB at 919-773-2600 or rkeaton@ascld-lab.org
- "Percentage Yes" for each of the criteria levels is determined by dividing the "Total Yes" by the sum of the "Total Yes + Total No"

$$\frac{\text{Total Yes}}{\text{Total Yes + Total No}} = \text{Percentage Yes}$$

- Any laboratory accredited by ASCLD/LAB as of December 31 of each year must submit an *Annual Accreditation Audit Report* to ASCLD/LAB by April 1 of the following year. This report and supporting documentation can serve as proof of an annual audit (1.4.2.3). Laboratories applying for accreditation must conduct an audit in order to complete the Grade Computation Sheets and other supporting documents required with the application. Those documents may serve as proof of an audit for the purpose of the accreditation inspection. Laboratories having an inspection for renewal of accreditation, may utilize the application documents and inspection report as supporting documentation of an audit for the year in which the inspection is conducted. While appropriate as supporting documentation, neither the application for renewal nor the subsequent inspection report replaces the required *Annual Accreditation Audit Report*.

BYLAWS OF THE
AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS
LABORATORY ACCREDITATION BOARD (ASCLD/LAB)

ARTICLE I - NAME

The name of the organization is the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB).

ARTICLE II - PURPOSES

The purposes for which ASCLD/LAB is organized are: to improve the quality of laboratory services provided to the criminal justice system; to offer to the general public and to users of laboratory services a means of identifying those crime laboratory facilities which satisfy accreditation criteria; to develop and maintain criteria which can be used by a laboratory to assess its level of performance and strengthen its operation; and to provide an independent, impartial and objective system by which laboratory facilities can benefit from a total organizational review.

ARTICLE III - MEMBERSHIP

Section A - Delegate Assembly

1. The Delegate Assembly shall consist of the laboratory director (or his/her designated alternative) of all accredited laboratories and directors of laboratory systems accredited by ASCLD/LAB.

2. The Chair of ASCLD/LAB board of directors, hereinafter referred to as the Chair, shall preside over meetings of the Delegate Assembly.

3. At least 25 members, hereinafter referred to as delegates, of the Delegate Assembly shall be in attendance in order to conduct business and vote.

Section B - Board of Directors

1. The business of ASCLD/LAB shall be the responsibility of the board of directors, hereinafter referred to as the Board.

2. Expired terms of members of the Board shall be filled by secret ballot of the Delegate Assembly at its annual meeting.

Section C - Board of Directors Membership Categories

1. The Board shall have nine (9) voting members, and one (1) nonvoting ex-officio member.

2. The nine (9) voting members of the Board shall be comprised of:

   a. seven delegates,
   b. one member representing law enforcement and prosecuting attorneys
   c. one public member.

3. The President, President-Elect, or Past President of the American Society of Crime Laboratory Directors, as designated by the ASCLD President, shall be the ex-officio member of the Board.

Section D - Board of Directors Qualifications

1. Delegates who are elected to the Board shall represent a broad range of crime laboratory experience (e.g., size of laboratory, degree of specialization, extent of service, forensic scientist and sworn officer, geographical distribution, and level of government).

2. No special qualification shall exist for the other two voting members of the Board.

Section E - Conflicts of Interest

In addition to the qualifications previously listed, no Board member shall exhibit any conflicts of interest. Specifically, no member of the Board shall:

1. participate in any Board deliberation or action relative to accreditation of a laboratory if personal bias would prevent a fair decision or

2. participate in any Board deliberation or action relative to a complaint or decision pertaining to any crime laboratory within his/her employing organization.

Section F - Terms of Office

1. Delegate members of the Board shall serve a four-year term and not serve consecutive four-year terms.

Section G - Selection Procedures

1. The Chair shall select and convene yearly a three person nominating committee which shall prepare a slate of candidates to fill expired Board terms of office. The nominating committee chair shall be a member of the Delegate Assembly and the Board; the other nominating committee members shall be delegates but shall not be members of the Board.

2. The chair of the nominating committee shall mail a letter to each delegate three months prior to the annual meeting inviting nominees for expired positions.

3. The chair of the nominating committee shall solicit nominations from organizations representing law enforcement, prosecuting attorneys, and the public for expired terms of positions representing these groups.

4. The nominating committee shall present to the Delegate Assembly a slate of board of director candidates consisting of two Delegate Assembly members for each vacancy to be filled by delegates and at least one member for each board of director position to be filled by law enforcement, prosecuting attorneys, or the public.

5. Nominations may be made from the floor during the annual meeting.

6. Voting shall be by secret ballot and elections for each position shall be decided by plurality vote of the delegate assembly members present.

7. Any Board vacancies that occur in mid-term shall be filled at the next regularly scheduled annual meeting of the Delegate Assembly in accordance with the procedures in Article III.

ARTICLE IV - OPERATIONS - BOARD OF DIRECTORS

Section A - Personnel

1. The Board shall elect a Chair from its membership. The Chair shall be the official spokesman for ASCLD/LAB and shall preside at all meetings of the Board. The Chair shall serve a one-year term and may not serve more than two consecutive terms.

2. The Board shall elect a treasurer from its membership. The treasurer shall serve for a one-year term and may serve consecutive terms. The treasurer shall manage the financial and budgetary affairs of ASCLD/LAB and shall be accountable to and act under the direction and control of ASCLD/LAB.

3. In the event of the incapacitation of the Chair, the treasurer shall take on the duties of the Chair until the Chair is able to resume those duties.

4. The Board may employ an Executive Director. The Executive Director will provide administrative support to the Board and shall serve at the pleasure of the Board.

5. The Executive Director shall manage all daily business affairs of ASCLD/LAB including processing of all materials associated with accreditation activities, maintenance of records, coordination of inspections, maintenance of financial and budgetary records, newsletter publications and the oversight of any administrative staff.

Section B - Quorum

A majority of voting members shall constitute a quorum of the Board.

Section C - Accreditation Decisions

In order to render any accreditation decisions, a two-thirds vote of the voting Board members present shall be necessary.

Section D - Financial Management

1. The treasurer shall be responsible for the oversight of collection and disbursement of all monies. The Executive Director and administrative staff personnel may fulfill the day to day fiscal requirements of the Corporation.

2. The financial affairs of ASCLD/LAB shall be subject to an annual internal audit. An external audit/review by a CPA firm shall be made within nine (9) months following the election of a new treasurer or at the direction of the Board.

3. The Board shall evaluate periodically the schedule of fees to ensure that only the necessary expenditures are made for the maintenance and operation of the accreditation activities.

Section E - Notification of Meetings

1. The Chair shall notify each Board member in writing of the location and date of any Board meeting at least thirty (30) days in advance of the meeting.

2. The location and date of the annual Delegate Assembly meeting shall be announced annually by the Chair to each delegate in writing sixty (60) days prior to the date of the meeting.

ARTICLE V - GUIDELINES AND PROCEDURAL AMENDMENTS

The Chair shall be responsible for evaluations of and suggested modifications to the entire accreditation process. Such evaluations shall be conducted periodically. Substantive changes to the accreditation process shall be ratified by a 2/3 majority of mail ballots cast by the members of the Delegate Assembly.

The Board shall mail to the Delegate Assembly, at least thirty (30) days prior to the annual meeting, any proposed changes to these bylaws. Changes to the bylaws shall be ratified by a 2/3 majority of mail ballots cast by members of the Delegate Assembly within sixty (60) days after the changes have been discussed at the annual meeting.

AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS
LABORATORY ACCREDITATION BOARD (ASCLD/LAB)

PROFICIENCY REVIEW PROGRAM

All references in the Proficiency Review Program document to "Board" means the ASCLD/LAB Board of Directors; "Executive Director" means the ASCLD/LAB Executive Director; "Quality Manager" means the ASCLD/LAB Quality Manager; "accredited laboratory" means a laboratory accredited by ASCLD/LAB; and "approved test provider" means a test provider which has been approved by ASCLD/LAB as an approved source of external proficiency tests.

TABLE of CONTENTS

I. Introduction

The proficiency testing and review program is an essential component of a laboratory's quality assurance program. A primary focus should be to identify areas where additional training or more stringent quality control may be of benefit, as well as to demonstrate the current competence of the laboratory. To obtain the optimum benefit from proficiency testing, laboratory and ASCLD/LAB representatives should emphasize the educational aspects of the program and, whenever possible, avoid a punitive approach when taking corrective actions or otherwise adhering to the elements of the Proficiency Review Program.

II. Purpose of Proficiency Review Program

Compliance Monitoring

Proficiency testing is an integral part of an effective quality assurance program. It is one of many measures used by laboratories to monitor performance and to identify areas where improvement may be needed. A proficiency testing program is a reliable method of verifying that the laboratory's technical procedures are valid and that the quality of work is being maintained.

Each accredited laboratory must participate annually in external proficiency testing for each discipline in which it provides services. The required external proficiency test(s) must consist of a sample obtained from an ASCLD/LAB approved test provider, when an approved provider is available. Names of such providers are available from ASCLD/LAB and are maintained on the ASCLD/LAB webpage at www.ascld-lab.org.

To retain accredited status for a full five year term, a laboratory must continue to meet the standards under which it was accredited. One of the means by which ASCLD/LAB monitors compliance is by reviewing proficiency testing reports submitted by approved test providers.

The laboratory must authorize each test provider to release directly to ASCLD/LAB the appropriate number of proficiency test results required by applicable standards. Laboratories may elect to authorize a test provider to release all proficiency test results to ASCLD/LAB, exceeding the minimum number required by applicable standards.

Laboratories should refer to the most current version of the *ASCLD/LAB Accreditation Manual* and the *FBI's Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories* to ensure a complete awareness and understanding of all standards and criteria related to proficiency testing.

Each laboratory must have a written procedure which it uses to initiate a review and, whenever applicable, take corrective action when proficiency testing results are inconsistent with the expected results of a test.

III. Administration of Proficiency Review Committees (PRC)

A. Creation

For each of the accredited disciplines, the ASCLD/LAB Board of Directors (Board) has established a Proficiency Review Committee (PRC). As new

disciplines are approved, the Board will establish additional PRCs. Each PRC is made up of one Chair and one or more additional members. The maximum number of members on each PRC will be subject to need, input from the PRC Chair, and final review and approval of the Board.

B. Appointment of PRC Members

The Chair and members of each PRC are selected and appointed by the Board. The Board generally solicits input from the Executive Director, the ASCLD/LAB Quality Manager, and the current Chair of the appropriate PRC. Input from Delegate Assembly members will also be considered.

Each PRC member (including the Chair) is approved and appointed by the Board for a term of up to four years. Appointments may be renewed at the discretion of the Board.

C. Qualifications of PRC Members

The Board may consider the following factors when evaluating an individual for appointment to a PRC:

- Expertise in the discipline (court qualified in at least one sub-discipline of the PRC)
- Broadness of experience
- Demonstrated activity in the forensic science community
- Geographical location
- Size and type of agency in which currently employed

While it is preferable to appoint PRC members from accredited laboratories, the Board reserves the right to appoint at least one member per PRC from the community at-large, when such an appointment would serve the best interest of the Proficiency Review Program. However, in all cases, the designated Chair of each PRC will be from an ASCLD/LAB accredited laboratory.

D. Confidentiality / Conflict of Interest

Each PRC member appointed by the Board must sign and abide by the *Code of Conduct for ASCLD/LAB Volunteers*.

No PRC member may participate in the discussion and resolution of any test result involving an apparent inconsistency originating from the laboratory at which he/she is employed. A PRC member working in a laboratory *system* may not participate in the discussion and resolution of any test result involving an apparent inconsistency originating in a laboratory within their system.

No PRC member may independently work (or volunteer) as a consultant to or for any proficiency test provider while serving on the PRC. Any activity on the part of a PRC member to coordinate, develop, or enhance test manufacturing guidelines with a test provider(s) must be approved by the appropriate PRC Chair or, in the case of the Chair, by the ASCLD/LAB Quality Manager. Manufacturing guidelines developed with input from any PRC will be made available by ASCLD/LAB to all appropriate test providers.

A PRC member assigned or approved by his/her laboratory director to complete a pre-distribution, external proficiency test will not be considered by ASCLD/LAB to be working independently for the test provider.

A Laboratory Director who agrees to have his/her laboratory serve as a referee laboratory should not assign a current PRC member to conduct any of the analyses.

IV. Roles and Responsibilities Related to the Proficiency Testing Program

A. Accredited Laboratories

Each accredited laboratory will:

- Participate annually in at least one (1) external proficiency test for each forensic discipline in which it provides services. The external proficiency test must be from a provider approved by ASCLD/LAB - when available. When an approved provider is not available for a particular discipline, the laboratory must make other arrangements to participate in an external proficiency test for that discipline. Each examiner and technician performing DNA analytical techniques must complete two external tests annually. In accordance with 1.4.3.2, ASCLD/LAB approved providers must be used.

- Submit an appropriate release form to the approved proficiency test provider authorizing release of the appropriate number of proficiency test results required by applicable standards directly to ASCLD/LAB.

- Ensure that <u>each</u> examiner completes at least one (1) proficiency test annually in each discipline. With the exception of DNA, only one examiner per discipline is required to take an external proficiency test. The tests taken by other examiners in the discipline may be internal or external. Each examiner and technician performing DNA analytical techniques must complete two external tests annually.

- Maintain and produce, upon request, records documenting compliance with appropriate ASCLD/LAB accreditation standards for proficiency tests. It is recommended that, as a minimum, documentation of compliance be maintained for the period between accreditation inspections.

- Maintain records of any inconsistency in any proficiency test and the corrective action steps taken, and report complete and accurate proficiency testing information on all Class I and II inconsistencies in the next *Annual Accreditation Audit Report* following the inconsistency.

- Respond in writing within 30 calendar days (or within 45 calendar days for laboratories outside the continental United States) to any request for information from a PRC or ASCLD/LAB. The response to the inquiry must be postmarked within the time allowed. When extenuating circumstances exist, a Laboratory Director may request from the appropriate PRC Chair a 15 calendar day extension to respond.

- Notify the ASCLD/LAB Quality Manager in writing (with a copy to the appropriate PRC Chair) immediately of failure to comply with any external proficiency testing requirement.

- Notify the test provider in writing (with a copy to the ASCLD/LAB Quality Manager) in a timely manner about any concerns related to an external proficiency test from an approved test provider.

- Request a replacement test from the test provider as soon as the laboratory realizes or suspects there is a problem with the original test they received.

- Inform ASCLD/LAB prior to resuming analysis in a discipline or sub-discipline that the laboratory voluntarily suspended as part of a corrective action plan or that the laboratory had discontinued for other reasons.

An accredited laboratory may:

- Submit a written request to the Executive Director to be exempted from participating in the approved external proficiency tests for that discipline, if the laboratory is accredited only in a specialized area of a discipline. The request must identify the test provider and test to be used. **In any case, the laboratory is never exempted from the annual external proficiency test requirement, but only from the requirement to use an approved test provider for that discipline.**

- Serve as a pre-distribution laboratory. A pre-distribution laboratory (also referred to as a reference laboratory) is a laboratory that agrees to complete the analysis of an external proficiency test sample prior to the general release of the test. The decision to act as a pre-distribution laboratory for a test provider is an independent decision of the appropriate laboratory director.

  Accredited laboratories acting as a pre-distribution laboratory may use their test results as fulfillment of their own accreditation requirement for external proficiency test completion provided they were not given information that would give them an advantage over other laboratories.

  An accredited laboratory serving as a pre-distribution testing laboratory that wants the pre-distribution test to count as a required external proficiency test must make arrangements with the test provider to be included in the *Summary & Individual Report for the PRC*. Depending on the test provider, inclusion in the *Summary & Individual Report for the PRC* may require resubmitting test results or retaking the test during the general release testing period. Check with your test provider.

- Serve as a referee laboratory. A referee laboratory is a laboratory that agrees to test a portion of a proficiency test sample from another accredited laboratory in an effort to work toward resolving an inconsistency or apparent inconsistency reported by the other laboratory. The decision to act as a referee laboratory for a test provider is an independent decision of the appropriate laboratory director.

B. Proficiency Review Committees

Each PRC will:

- Review the external proficiency test results provided by approved providers, for all accredited laboratories. At least two PRC members will be involved in the evaluation of any test results.

- Evaluate applicant test providers to determine if they meet the specifications and requirements of approved test providers and make recommendations to the ASCLD/LAB Quality Manager concerning the approval of proficiency test providers and tests.

- Make recommendations to the ASCLD/LAB Quality Manager concerning the appointment of PRC committee members.

- Define the criteria used to identify results considered to be inconsistent.

- Evaluate the significance of an inconsistency and, at the appropriate time, assign an apparent class I, II, or III (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency).

- Maintain strict confidentiality with regard to the test review process and all records pertaining to proficiency testing.

- Provide copies of all PRC related correspondence to the ASCLD/LAB Quality Manager in a timely manner.

- Maintain, transfer, or destroy records of activities in accordance with the ASCLD/LAB records retention policy and procedures.

- As appropriate, coordinate test manufacturing guidelines with appropriate test providers. Once agreed upon, the manufacturing guidelines must be provided by the PRC Chair in writing to the ASCLD/LAB Quality Manager. The ASCLD/LAB Quality Manager is responsible for providing the agreed upon manufacturing guidelines in writing to the appropriate test provider(s).

C. ASCLD/LAB Quality Manager

The ASCLD/LAB Quality Manager will:

- Make recommendations to the Executive Director and Board regarding the appointment of PRC members and Chairs, and the approval of test providers and tests.

- Coordinate the review of test provider applications. The review process may include an on-site visit by the ASCLD/LAB Quality Manager and/or representatives of the appropriate PRC(s). When an on-site visit is deemed appropriate, the ASCLD/LAB Quality Manager will generally serve as Team Captain of the site-visit team and will, in most cases, be accompanied by one or more members of the appropriate PRC(s).

- Monitor the activities of each PRC to determine compliance with the Proficiency Review Program.

- Maintain information regarding the annual participation of all accredited laboratories in the external proficiency program, to include any inconsistencies reported by a PRC and the resolution of each inconsistency.

- Communicate with laboratories and conduct compliance inquiries of any laboratory failing to complete any required external proficiency test.

- Maintain records of inconsistencies to track previously reported inconsistencies, particularly in the same discipline from the same laboratory.

- Maintain a file of pending inconsistency issues, to ensure proper closure on all inconsistency inquiries.

- Track and periodically update PRC Chairs on changes in accredited laboratories and/or changes in accredited disciplines within laboratories.

- Communicate and meet with PRC Chairs, PRC members, and/or test providers as appropriate.

- Provide periodic communications to all approved test providers, advising them of any proficiency testing issues, concerns, or Board approved changes to the program.

- Communicate all relevant Board decisions (related to a specific laboratory on proficiency testing items) to the affected laboratory and monitor the laboratory's on-going compliance with Board decisions. (Exception: The Executive Director will communicate *sanctions* to affected laboratories)

- Prepare general, specific, and special reports for the Executive Director and Board as needed or as requested.

- Keep the Executive Director and Board, as appropriate, informed of all issues and concerns related to the Proficiency Review Program.

- Maintain records of activities in accordance with ASCLD/LAB records retention policy and procedures.

- Recommend changes as needed, meeting with PRC Chairs, PRC members, and/or test providers when appropriate.

- Provide information and guidelines for publication in the ASCLD/LAB newsletter or on the ASCLD/LAB website for any items relating to the Proficiency Review Program.

- Provide any agreed upon manufacturing guidelines in writing to the appropriate test provider(s).

D. Executive Director

The Executive Director will:

- Provide general oversight of the Proficiency Review Program.
- Provide guidance to and consult with the ASCLD/LAB Quality Manager, the PRC Chairs and the Board concerning all aspects of the Proficiency Review Program.
- Communicate Board imposed sanctions to affected laboratories and coordinate all appeals of sanctions.
- Conduct an annual audit of the ASCLD/LAB Quality Assurance Program (to include the Proficiency Review Program) and provide a report concerning the audit to the Board at its spring meeting.
- Make recommendations to the Board and ASCLD/LAB Quality Manager concerning changes in the Proficiency Review Program.

E. Board of Directors

The Board of Directors will:

- Approve appointments to the Proficiency Review Committees and the designation of PRC Chairs.
- Approve test providers and tests.
- Determine sanctions affecting the accredited status of a laboratory.
- Review laboratory-specific reports from the Executive Director or ASCLD/LAB Quality Manager and render decisions.
- Approve all changes to the Proficiency Review Program.

F. Delegate Assembly

The Delegate Assembly will:

- Serve as the final body of resolution for any laboratory that appeals a Board ruling or sanction. The decision of the Delegate Assembly is final and binding.

G. Approved Proficiency Test Providers

Each Approved Test Provider will:

- Maintain on-going compliance with all standards of the *ASCLD/LAB Proficiency Test Provider Program.*

For Test Reporting:

- (*Preliminary Report for Test Subscribers*) Provide each accredited laboratory with a preliminary report for each test within 30 calendar days after the due date of the test. The preliminary report shall include a description of how the test was manufactured and, when appropriate, the manufacturer's expected results.

- (*Summary & Individual Report for the PRC*) Provide the PRC with a summary and individual report of the results for each accredited laboratory which authorized release within 90 calendar days after the proficiency test due date.

- (*Summary Report for Test Subscribers*) Provide or make available to each test subscriber a summary report within 90 calendar days after the test due date. The summary report shall include the following:

  1. Compiled results reported from all participants

  2. Description of the test design, test objective and details of its manufacture

  3. Results of pre-distribution laboratories confirming the manufacturer's specifications (expected/target results) or a statement that the results of pre-distribution testing confirmed the expected results

  4. Results of all reporting subscribers identified only by a unique code

  5. A brief summary and/or analysis of all results plus any additional comments provided by subscribers

H. Referee Laboratories

Each Referee laboratory will:

- Immediately disclose to ASCLD/LAB any conflict of interest if called upon to act as a referee laboratory.

- Maintain strict confidentiality with regard to the test review process and all records or reports pertaining to the testing process, releasing test results only to the requesting laboratory and ASCLD/LAB.

- Complete any required analyses and provide a written report of findings to the requesting laboratory in a timely manner, with a copy to the ASCLD/LAB Quality Manager and the appropriate PRC Chair.

I. Pre-distribution (or Reference) Laboratories

Each Pre-distribution laboratory will:

- Take appropriate steps to maintain confidentiality of all pre-distribution test information, restricting any discussions and release of pre-distribution test results and test design comments to the appropriate test provider.

- When the laboratory wants the pre-distribution test to count as a required external proficiency test, make arrangements with the test provider to be included in the Summary & Individual Report for the PRC. Depending on the test provider, inclusion in the Summary & Individual Report for the PRC may require resubmitting test results or retaking the test during the general release testing period.

V. Test Review Process

A. Inconsistencies (See Flowchart)

The PRC will review the proficiency test reports received from approved test providers. One of the critical factors in proficiency testing is the determination of acceptable levels of performance. The manufacturer's specifications, results of the pre-distribution laboratories, and (when judged applicable by the PRC) the consensus of participating accredited laboratories will be considered by the PRC in determining acceptable levels of performance.

Results that the PRC deem outside the acceptable level or range will be considered an apparent inconsistency, pending an explanation by the laboratory in question.

Upon receipt of a report that an accredited laboratory's results indicate an apparent inconsistency, the PRC will issue a written *Notification of Apparent Inconsistency* **(See Sample1 and Sample2)** requesting a response within thirty (30) calendar days from the date that the notification is issued (45 calendar days for laboratories outside the continental United States).

Upon being notified of an inconsistency, a laboratory must provide a written response to the PRC within the time allowed and:

- Acknowledge the inconsistency, providing a written description of the corrective measures enacted or planned **OR**

- Challenge the *Notification of Apparent Inconsistency* and provide a written explanation (without requesting a referee laboratory), possibly providing sufficient information supporting the position that the results are not inconsistent with the expected results **OR**

- Challenge the *Notification of Apparent Inconsistency*, provide a written explanation, and request a reanalysis of the proficiency sample(s) in question by a referee laboratory.

  A referee laboratory may be suggested by the laboratory challenging the apparent inconsistency but must be acceptable to the PRC. In the event that a referee laboratory is used, a portion of the sample(s) analyzed by the accredited laboratory and a portion of the same sample(s) retained by the test provider will be forwarded to the referee laboratory for

reanalysis. Any associated costs will be the responsibility of the accredited laboratory requesting the reanalysis.

In a timely manner after receipt of the laboratory's written response to the *Notification of Apparent Inconsistency*, the PRC will take one of the following actions:

- Accept the laboratory's explanation, determine that there was no inconsistency, and issue a *Recommended Closure of Apparent Inconsistency Review* (**See Sample3**) letter to the ASCLD/LAB Quality Manager. No assignment of apparent inconsistency class would be necessary in this case.

- Accept the laboratory's response; assign an apparent inconsistency class (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency); evaluate the corrective action taken by the laboratory; and issue a *Recommended Closure of Inconsistency Review* letter to the ASCLD/LAB Quality Manager if all corrective action measures have been completed to the satisfaction of the PRC.

- Accept the laboratory's response; assign an apparent inconsistency class (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency); evaluate the corrective action taken by the laboratory; and, if corrective action is not yet complete, issue a *Referral* (**See Sample4**) letter to the laboratory, referring the matter to the ASCLD/LAB Quality Manager for follow-up pending the laboratory's documented completion of all corrective action measures. Documentation of completion should be provided by the laboratory to the ASCLD/LAB Quality Manager within a reasonable time period. The length of time depends on the scope and elements of the corrective action plan.

- Continue to have questions or concerns with the laboratory's response and issue a *Request for Additional Information* (**See Sample5**) to the laboratory and advise the laboratory to respond again to the PRC within thirty (30) calendar days (45 calendar days for laboratories outside the continental United States).

- Note the laboratory's request for reanalysis by a referee laboratory; assign an apparent inconsistency class (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency); and issue a *Referral* letter to the laboratory and refer the matter to the ASCLD/LAB Quality Manager.

In a timely manner after receipt of a response to a *Request for Additional Information* the PRC may take any of the following actions:

- Accept the laboratory's response; assign an apparent inconsistency class (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency) and issue a *Recommended Closure of Inconsistency Review* letter to the ASCLD/LAB Quality

Manager if all corrective action measures have been completed to the satisfaction of the PRC.

- Accept the laboratory's response; assign an apparent inconsistency class (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency) and, if corrective action is not yet complete, issue a *Referral* letter to the laboratory, referring the matter to the ASCLD/LAB Quality Manager for follow-up pending the laboratory's documented completion of all corrective action measures. Documentation of completion should be provided by the laboratory to the ASCLD/LAB Quality Manager within in a reasonable time period. The length of time depends on the scope and elements of the corrective action plan.

- Continue to have questions or concerns with the laboratory's response; assign an apparent inconsistency class (communicating with the ASCLD/LAB Quality Manager prior to assigning an apparent Class I inconsistency); and issue a *Referral* letter to the laboratory and refer the matter to the ASCLD/LAB Quality Manager.

For the response to either a *Notification of Apparent Inconsistency* or *Request for Additional Information*, the PRC Chair may, at their discretion after considering the circumstances, grant one extension of fifteen (15) calendar days if requested by the Laboratory Director. The request and approval may be verbal, but the PRC Chair must notify the ASCLD/LAB Quality Manager in writing (to include E-mail) of any extension at the time the extension is granted.

Any response from a laboratory to a PRC inquiry about an apparent inconsistency must include either sufficient information supporting the position that the results are not inconsistent with the expected results **OR** a description of the steps taken to investigate the possible cause of the inconsistency and a description of the corrective action enacted or planned as a result.

For example, if the inconsistency is due to a systemic error, appropriate corrective action may include the discontinuation of the method involving the technical procedure until the cause is understood and corrective measures have been implemented may be appropriate, or a review of all casework involving the technical procedure prior to and subsequent to the date of the discovery of the technical problem. If the inconsistency is a result of an individual's analytical or interpretive error, a discontinuation of the analyst's casework involving the technical procedure and a review of the analyst's casework involving the technical procedure prior to and subsequent to the date of discovery of the technical problem may be required. The accredited laboratory should also review the appropriateness of its training program and determine the need for retraining of the analyst(s). If corrected/amended reports are issued, notification of the appropriate agencies may also be necessary. Corrective action taken as a result of a Class I or II inconsistency must include analysis of another (new) set of comparable samples by the person responsible for the inconsistency.

Once an apparent inconsistency review has been directed or turned over to the ASCLD/LAB Quality Manager for any reason, all future communications from the laboratory regarding the inconsistency will be directed to the ASCLD/LAB Quality Manager.

The ASCLD/LAB Quality Manager, working with the Executive Director, will handle all inconsistency related matters referred from the PRC in a manner designed to bring about a timely and appropriate resolution. The ASCLD/LAB Quality Manager will work with the laboratory and the PRC (and the test provider when appropriate) to gather all pertinent information needed to prepare a report for the Executive Director and Board. The Board will review and consider each report and may issue a finding(s) and/or recommendation(s). Recommendations may include suggestions for training, modification of analytical procedures, or changes in administrative procedures. Depending on the nature, severity, and/or persistence of the inconsistency, the Board may sanction the laboratory - affecting the accredited status of the laboratory.

Except for sanctions, the ASCLD/LAB Quality Manager will inform the laboratory (and PRC) of the Board's finding or recommendations and then monitor the laboratory's compliance with that decision to bring resolution to the inconsistency process. At the Board's discretion, an on-site inspection may be required to more fully evaluate compliance.

All sanctions imposed by the Board will be administered by the Executive Director.

A more detailed discussion of sanctions, appeals, and reinstatement of accredited status may be found elsewhere in the main body of the *ASCLD/LAB Accreditation Manual.* The laboratory should clearly understand that the Board's uses of sanctions, the appeals process, and reinstatements are not limited to proficiency testing issues.

B. Guidelines for Determining the Level of Apparent Inconsistency

Each PRC will assign *"apparent"* classes to inconsistencies. All inconsistency reviews conducted by the PRCs will be included in the PRP reports prepared by the ASCLD/LAB Quality Manager and presented to the Board at each Board meeting. The Board may confirm, change, or dismiss any PRC assignment of apparent inconsistency class and may act upon any other PRP business necessary to bring closure to any PRP related business.

Subject to the final review and approval of the Board as described above, the PRC Chairs will use the following guidelines to determine the level of apparent inconsistency occurring on an external proficiency test.

The assignment of an apparent Class I to an inconsistency occurring on an external proficiency test must be discussed with the PRC Chair and the ASCLD/LAB Quality Manager prior to the assignment by a PRC Chair.

- **Class I** - The nature and cause of the inconsistency raises immediate concern regarding the quality of the laboratory's work product.

  Examples of a Class I inconsistency may include an erroneous identification, false identification, or false positive.

- **Class II** - The inconsistency is due to a problem which may affect the quality of the work, but is not serious enough to cause immediate concern for the over-all quality of the laboratory's work product.

Examples of a Class II inconsistency may include a missed identification or false negative.

- **Class III** - The inconsistency is determined to have only minimal effect or significance, be unlikely to recur, is not systemic, and does not significantly affect the fundamental reliability of the laboratory's work.

  An example of a Class III inconsistency may include an administrative or transcription mistake.

Repeated instances of Class II or Class III (or a combination of Class II or Class III) inconsistencies occurring in the same laboratory over time (or at one time) may be viewed as rising to the level of Class I.

An exhaustive list of examples for each class is not provided because the facts of each instance may impact the assignment of an inconsistency to a particular class.

VI. Compliance with External Proficiency Testing Requirements

Accredited laboratories are required to remain compliant with ASCLD/LAB's proficiency testing requirements. After becoming aware of any instance of non-compliance by an accredited laboratory, the ASCLD/LAB Quality Manager will notify the laboratory in writing and request an explanation.

VII. Failure to Respond

A laboratory's failure to respond to the PRC in writing within the time allowed for either a *Notification of Apparent Inconsistency* or a *Request for Additional Information* will result in the PRC forwarding a *Failure to Respond Notification* (**See Sample6**) to the ASCLD/LAB Quality Manager (with a copy to the laboratory).

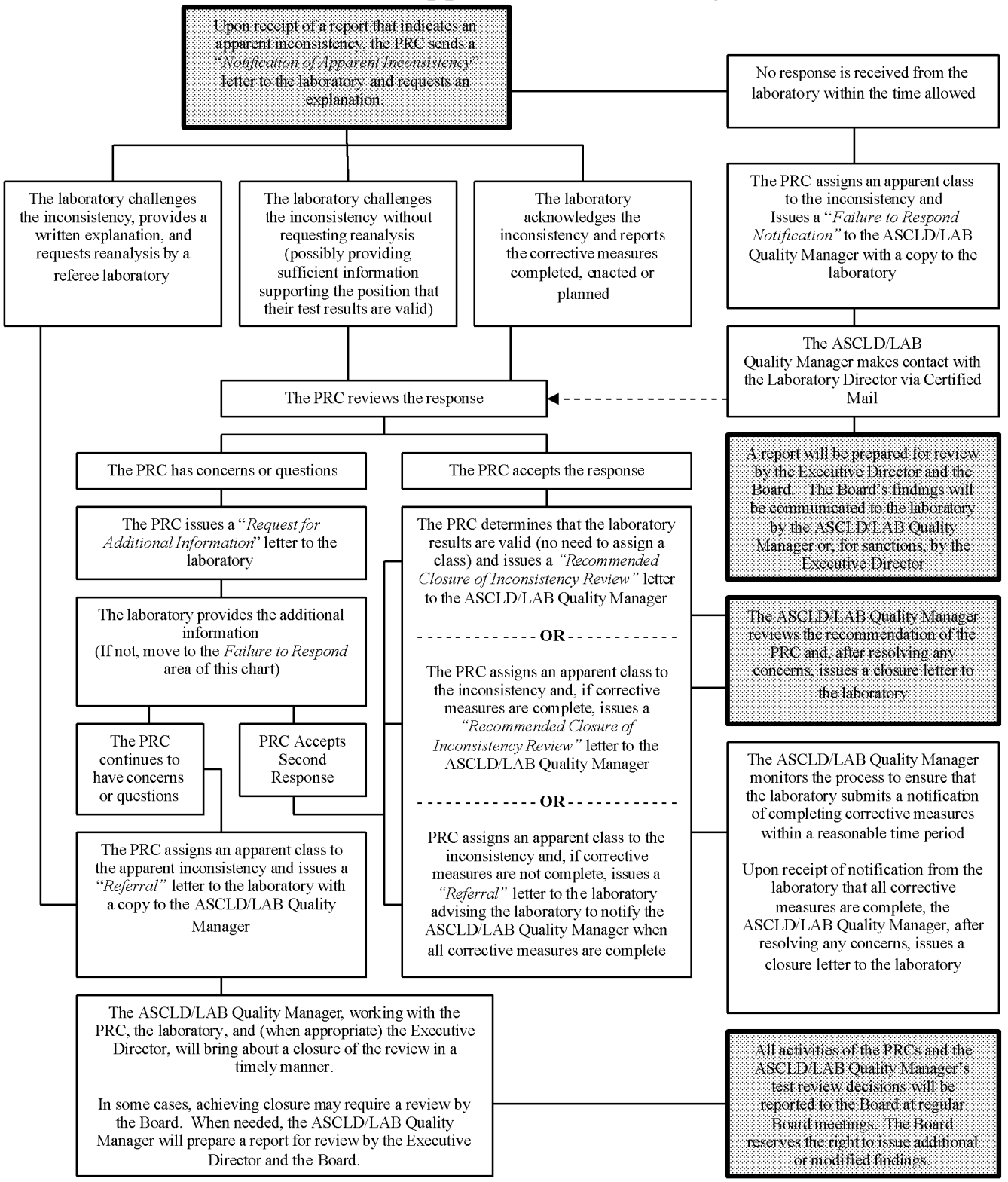
After receiving a *Failure to Respond Notification*, or after failing to receive a written response to any correspondence sent to the laboratory by the ASCLD/LAB Quality Manager, the ASCLD/LAB Quality Manager will send a certified letter to the laboratory not responding, notifying the laboratory that a written response to the ASCLD/LAB Quality Manager's inquiry is expected within thirty (30) calendar days (45 calendar days for laboratories outside the continental United States), or the Board may impose a sanction. All instances of a laboratory failing to respond to a PRC within the time allowed will be reported to the Board.

VIII. Communications between PRCs and Laboratories

To maintain appropriate documentation of the Proficiency Review Program, all communications from a PRC member (including communications from the Chair) to a laboratory regarding the review of specific proficiency test results must be in writing.

This provision in no way prohibits a PRC Chair or member from participating in non-written communications initiated by a laboratory. The PRC will not direct corrective measures, but may provide guidance to a laboratory when contact is initiated by the laboratory.

ASCLD/LAB® Proficiency Review Program
Process for Apparent Inconsistency Reviews



A laboratory may appeal a PRC/Quality Manager decision to the Board or a Board decision to the Delegate Assembly in accordance with the appeals process outlined in the accreditation manual. Contact the Executive Director for additional information regarding any appeal.

SAMPLE 1

(On ASCLD/LAB letterhead)

Proficiency Review Program
NOTIFICATION OF APPARENT INCONSISTENCY

{date}

{address}
{address}
{address}
{address}

The {insert discipline} Proficiency Review Committee (PRC) has been charged with reviewing results of {insert discipline} proficiency tests provided by ASCLD/LAB® approved providers for all ASCLD/LAB® accredited laboratories.

A PRC review of the result reported by your laboratory, Certificate # {insert #}, for the {insert test provider name} {insert test name} {insert test number}, indicates an apparent inconsistency. The nature of the inconsistency involves {insert free text description}. This is inconsistent with the manufacturer's reported information and pre-distribution testing.

Prior to this committee making any recommendation to the ASCLD/LAB® Quality Manager, the PRC is requesting any additional information, explanations, or actions taken regarding this apparent inconsistency.

Please submit your written response the address listed below within thirty (30) calendar days of the date of this letter. {change this to 45 calendar days for labs outside the continental United States}

Thank you for your assistance in addressing this issue.

Sincerely,

{insert PRC name}
{insert mailing address for return of requested information}

cc: {ASCLD/LAB Quality Manager}
{PRC Chair – if letter is being sent by a PRC member other than the chair}

SAMPLE 2

(On ASCLD/LAB letterhead)

Proficiency Review Program
NOTIFICATION OF APPARENT INCONSISTENCY

{date}

{address}
{address}
{address}
{address} ASCLD/LAB Certificate # {insert #}

The ASCLD/LAB Latent Print Proficiency Review Committee has reviewed your laboratory's results for the following proficiency test:

{insert identifying test information}

If a result in a latent print proficiency test is different than the consensus of 75% of accredited laboratory results, the result is considered an apparent inconsistency. An apparent inconsistency was found in your laboratory's test results as follows:

Manufacturer and consensus result for latent ___ was: Identified to Item _____
Your laboratory's result was:
_____

_____ of accredited laboratories correctly identified latent print _____

Please provide a written response to the PRC regarding the above apparent inconsistency within thirty calendar days of the date of this notification indicating: {change this to 45 calendar days for labs outside the continental United States}

1) The results of your investigation
2) Corrective action taken

Thank you for your assistance in addressing this issue.

Sincerely,

{insert PRC member name}

cc: {ASCLD/LAB Quality Manager}
{PRC Chair – if letter is being sent by a PRC member other than the chair}

SAMPLE 3

(On ASCLD/LAB letterhead)

Proficiency Review Program
RECOMMENDED CLOSURE OF INCONSISTENCY REVIEW

{date}

{Insert Name}, ASCLD/LAB Quality Manager
ASCLD/LAB
139J Technology Drive
Garner, North Carolina 27529

ASCLD/LAB Certificate # {insert #}
Apparent Inconsistency Class Assigned by PRC: Class

A written response from {Name of Laboratory} reference an apparent inconsistency in test results for the following test has been received:

{insert identifying test information}

The PRC has reviewed the response and finds that: (check only one)

___ The laboratory has provided sufficient data to support their original test results.

___ The laboratory's corrective actions, as reported, were appropriate and have been completed.

The PRC recommends that no further action be required.

Sincerely,

{insert PRC member name}

cc: {PRC Chair – if letter is being sent by a PRC member other than the chair}

(On ASCLD/LAB letterhead)

Proficiency Review Program
REFERRAL

{date}

{address}
{address}
{address} ASCLD/LAB Certificate # {insert #}
{address} Inconsistency Class Assigned by PRC: {insert Class #}

The {insert discipline} Proficiency Review Committee received your response to our request for information or additional information regarding the apparent inconsistency of your laboratory's test results for the following test:

{insert identifying test information}

Your timely response was appreciated. However, you have: {check one}

____ : Requested a reanalysis of the proficiency sample; **OR**

____ : Corrective measures outlined by your laboratory are still ongoing; **OR**

____ : The PRC has determined that additional review of the inconsistency is in order.

Therefore, please accept this correspondence as notification that all records related to this matter have been transferred to the ASCLD/LAB Quality Manager. All future inquiries or responses from your laboratory regarding this matter should be directed to:

ASCLD/LAB Quality Manager
139 J Technology Drive
Garner, North Carolina 27529

Sincerely,

{insert PRC name}

cc: {ASCLD/LAB Quality Manager}
{PRC Chair – if letter is being sent by a PRC member other than the chair}

(On ASCLD/LAB letterhead)

Proficiency Review Program
REQUEST FOR ADDITIONAL INFORMATION

{date}

{address}
{address}
{address}
{address} ASCLD/LAB Certificate # {insert #}

The {insert discipline} Proficiency Review Committee received your letter regarding the apparent inconsistency of your laboratory's test results for the following test:

{insert identifying test information}

Your timely response was appreciated. However, in order to continue and conclude our review of these test results the following additional information is requested:

{insert free text here}

Please submit your written response to the address below within thirty (30) calendar days of the date of this letter. {change this to 45 calendar days for labs outside the continental United States}

Sincerely,

{insert PRC name}
{insert mailing address for return of requested information}

cc: {ASCLD/LAB Quality Manager}
{PRC Chair – if letter is being sent by a PRC member other than the chair}

(On ASCLD/LAB letterhead)

Proficiency Review Program
FAILURE TO RESPOND NOTIFICATION

{date}

{Insert Name}, ASCLD/LAB Quality Manager
ASCLD/LAB
139 J Technology Drive
Garner, North Carolina 27529

On {insert date of letter to laboratory} a letter was sent to {insert name of laboratory and certificate number} requesting information or additional information regarding an apparent inconsistency on a proficiency test. The letter was addressed as follows:

{address}
{address}
{address}

and the apparent inconsistency occurred on the following proficiency test:

{insert identifying test information}

Based upon the information available at this time, the apparent class of inconsistency is {insert class #}.

The deadline for responding to the request was {insert date}. As of the date of this letter, neither a response nor a request for an extension has been received from the laboratory.

Sincerely,

{insert PRC member name}

cc: {insert name of Laboratory Director}
{PRC Chair – if letter is being sent by a PRC member other than the chair}

